Form 3160-3 FORM APPROVED (September 2001) OMB No. 1004-0136 Expires January 31, 2004 **UNITED STATES** 5. Lease Serial No. DEPARTMENT OF THE INTERIOR UTU-74869 **BUREAU OF LAND MANAGEMENT** 6. If Indian, Allottee or Tribe Name APPLICATION FOR PERMIT TO DRILL OR REENTER 7. If Unit or CA Agreement, Name and No. la. Type of Work: I DRILL ☐ REENTER Sand Wash Unit 8. Lease Name and Well No. ☑ Oil Well ☐ Gas Well ☐ Other lb. Type of Well: Single Zone Multiple Zone Sand Wash Federal R-31-8-17 Name of Operator 9. API Well No. 3-013-34133 **Newfield Production Company** 3a. Address 3b. Phone No. (include area code) Route #3 Box 3630, Myton UT 84052 (435) 646-3721 Monument Butte Location of Well (Report location clearly and in accordance with any State requirements.*) 11. Sec., T., R., M., or Blk. and Survey or Area NW/SE 1973' FSL 2055' FEL At surface Sec. 31, T8S R17E At proposed prod. zone 1445' FSL 2595' FEL 14. Distance in miles and direction from nearest town or post office* 12. County or Parish 13. State Approximatley 11.2 miles south of Myton, Utah Duchesne UT 15. Distance from proposed* 16. No. of Acres in lease 17. Spacing Unit dedicated to this well location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) Approx. 1445' t/lse, 1445' t/unit 20 Acres 1177.07 19. Proposed Depth 18. Distance from proposed location* 20. BLM/BIA Bond No. on file to nearest well, drilling, completed, applied for, on this lease, ft. Approx. 1167' 6260' WYR000493 21. Elevations (Show whether DF, KDB, RT, GL, etc.) 22. Approximate date work will start* 23. Estimated duration 5332' GL 4th Quarter 2008 Approximately seven (7) days from spud to rig release Attachments The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, shall be attached to this form: 1. Well plat certified by a registered surveyor. 4. Bond to cover the operations unless covered by an existing bond on file (see 2. A Drilling Plan. Item 20 above). Operator certification. 3. A Surface Use Plan (if the location is on National Forest System Lands, the Such other site specific information and/or plans as may be required by the SUPO shall be filed with the appropriate Forest Service Office). authorized officer 25. Signature Name (Printed/Typed) Date Mandie Crozier 7/14/08 Title Regulatory Specialist Approved by Name (Printed/Typed) Date BRADLEY G. HILI Title OFEMVIRONMENTAL MANAGER Application approval does not warrant or certify the the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct Conditions of approval, if any, are attached. Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United

*(Instructions on reverse)

Surf 581316X 44360374 40.072565 -110.646399 BH 681153X 44358744 40,071114 -110.048331

States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

Federal Approval of this Action is Necessary ?

RECEIVED
JUL 17 2008

DIV. OF OIL, GAS & MINING

T8S, R17E, S.L.B.&M. N89°51'E - 78.20 (G.L.O.) 1998 Aluminum Cap Lot 2 Lot 1 WELL LOCATION: SANDWASH R-31-8-17 Lot 3 ELEV. EXIST. GRADED GROUND = 5332' NORTH (G.L.O.) 89*57' , ∑ 1910 °, O Brass °, O Cap Z 31 DRILLING WINDOW 2055 Lot 4 (Comp.) **Bottom** of Hole 2595' (Comp.) of Hole 1973' (Comp.) Lot 5

N89°58'E - 78.31 (G.L.O.)

40.00

20.00



= SECTION CORNERS LOCATED

18.31

BASIS OF ELEV; U.S.G.S. 7-1/2 min QUAD (MYTON SE) SANDWASH R-31-8-17 (Surface Location) NAD 83 LATITUDE = 40° 04' 21.33" LONGITUDE = 110° 02' 49.91"

89*59' G.L.O.

NEWFIELD PRODUCTION COMPANY

WELL LOCATION, SANDWASH R-31-8-17, LOCATED AS SHOWN IN THE NW 1/4 SE 1/4 OF SECTION 31, T8S, R17E, S.L.B.&M. DUCHESNE COUNTY, UTAH.



Note:

The Proposed Well head bears S72°06'20"W 2158.91' from the East 1/4 Corner of Section 31.



TRI STATE LAND SURVEYING & CONSULTING

180 NORTH VERNAL AVE. - VERNAL, UTAH 84078 (435) 781-2501

DATE SURVEYED: 05-12-08	SURVEYED BY: T.H.
DATE DRAWN: 05-13-08	DRAWN BY: F.T.M.
REVISED:	SCALE: 1" = 1000'

NEWFIELD PRODUCTION COMPANY SAND WASH FEDERAL R-31-8-17 AT SURFACE: NW/SE SECTION 31, T8S, R17E DUCHESNE COUNTY, UTAH

ONSHORE ORDER NO. 1

DRILLING PROGRAM

1. GEOLOGIC SURFACE FORMATION:

Uinta formation of Upper Eocene Age

2. ESTIMATED TOPS OF IMPORTANT GEOLOGIC MARKERS:

Uinta 0' – 1599' Green River 1599' Wasatch 6260'

3. ESTIMATED DEPTHS OF ANTICIPATED WATER, OIL, GAS OR MINERALS:

Green River Formation 1599' - 6260' - Oil

4. PROPOSED CASING PROGRAM

Please refer to the Monument Butte Field Standard Operation Procedure (SOP).

5. MINIMUM SPECIFICATIONS FOR PRESSURE CONTROL:

Please refer to the Monument Butte Field SOP. See Exhibit "C".

6. TYPE AND CHARACTERISTICS OF THE PROPOSED CIRCULATION MUDS:

Please refer to the Monument Butte Field SOP.

7. AUXILIARY SAFETY EQUIPMENT TO BE USED:

Please refer to the Monument Butte Field SOP.

8. <u>TESTING, LOGGING AND CORING PROGRAMS:</u>

Please refer to the Monument Butte Field SOP.

9. <u>ANTICIPATED ABNORMAL PRESSURE OR TEMPERATURE:</u>

The anticipated maximum bottom hole pressure is 1800 psi. It is not anticipated that abnormal temperatures will be encountered.

10. ANTICIPATED STARTING DATE AND DURATION OF THE OPERATIONS:

Please refer to the Monument Butte Field SOP.

NEWFIELD PRODUCTION COMPANY SAND WASH FEDERAL R-31-8-17 AT SURFACE: NW/SE SECTION 31, T8S, R17E DUCHESNE COUNTY, UTAH

ONSHORE ORDER NO. 1

MULTI-POINT SURFACE USE & OPERATIONS PLAN

1. EXISTING ROADS

See attached Topographic Map "A"

To reach Newfield Production Company well location site Sand Wash Federal R-31-8-17 located in the NW 1/4 SE 1/4 Section 31, T8S, R17E, Duchesne County, Utah:

Proceed southwesterly out of Myton, Utah along Highway 40 - 1.4 miles \pm to the junction of this highway and UT State Hwy 53; proceed southeasterly – 8.8 miles \pm to it's junction with an existing dirt road to the southwest; proceed southwesterly – 1.0 miles \pm to it's junction with the beginning of the access road to the existing Sand Wash Federal 10-31T-8-17 well location.

2. PLANNED ACCESS ROAD

There is no proposed access road for this location. The proposed well will be drilled directionally off of the existing Sand Wash Federal 10-31T-8-17 well pad. See attached **Topographic Map** "B".

3. LOCATION OF EXISTING WELLS

Refer to Exhibit "B".

4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES

The proposed well will be drilled directionally off of the Sand Wash Federal 10-31T-8-17 well pad. There will be a pumping unit and a short flow line added to the tank battery for the proposed Sand Wash Federal R-31-8-17. All permanent surface equipment will be painted Carlsbad Canyon.

Please refer to the Monument Butte Field Standard Operating Procedure (SOP).

5. LOCATION AND TYPE OF WATER SUPPLY

Newfield Production will transport water by truck for drilling purposes from the following water sources:

Johnson Water District Water Right: 43-10136

Neil Moon Pond

Water Right: 43-11787

Maurice Harvey Pond Water Right: 47-1358

Newfield Collector Well

Water Right: 41-3530 (A30414DV, contracted with the Duchesne County Conservancy District).

Please refer to the Monument Butte Field SOP. See Exhibit "A".

6. SOURCE OF CONSTRUCTION MATERIALS

The proposed Sand Wash Federal R-31-8-17 will be drilled off of the existing Sand Wash Federal 10-31T-8-17well pad. No additional surface disturbance will be required for this location.

7. <u>METHODS FOR HANDLING WASTE DISPOSAL</u>

Please refer to the Monument Butte Field SOP.

8. ANCILLARY FACILITIES

Please refer to the Monument Butte Field SOP.

9. WELL SITE LAYOUT

See attached Location Layout Diagram.

10. PLANS FOR RESTORATION OF SURFACE

Please refer to the Monument Butte Field SOP.

 SURFACE OWNERSHIP - Bureau Of Land Management (Proposed location and access roads leading to).

12. OTHER ADDITIONAL INFORMATION

Water Disposal

Immediately upon first production, all produced water will be confined to a steel storage tank. If the production water meets quality guidelines, it is transported to the Ashley, Monument Butte, Jonah, and Beluga water injection facilities by company or contract trucks. Subsequently, the produced water is injected into approved Class II wells to enhance Newfield's secondary recovery project.

Water not meeting quality criteria, is disposed at Newfield's Pariette #4 disposal well (Sec. 7, T9S R19E), State of Utah approved surface disposal facilities, or Federally approved surface disposal facilities.

Threatened, Endangered, And Other Sensitive Species

Ferruginous Hawk: Due to this proposed well location's proximity (less that 0.5 mile) to an existing inactive ferruginous hawk nest site, no new construction or surface disturbing activities will be allowed between March 1 and July 31. If the nest remains inactive on May 30th (based on a pre-construction survey by a qualified biologist), the operator may construct and drill the location after that date. If the nest site becomes active prior to May 30, no new construction or surface disturbing activities will be allowed within 0.5 mile of the nest until the nest becomes inactive for two full breeding seasons. In the event that this well becomes a producing well, it must be equipped with a multi-cylinder engine or hospital muffler to reduce noise levels.

Reserve Pit Liner

A 16 mil liner with felt is required. Please refer to the Monument Butte Field SOP.

Location and Reserve Pit Reclamation

Please refer to the Monument Butte Field SOP.

The following seed mixture will be used on the topsoil stockpile, to the recontoured surface of the reserve pit, and for final reclamation: (All poundages are in pure live seed)

Squirrell Tail	Elymus Elymoides	6 lbs/acre
Siberian Wheatgrass	Agropyron Fragile	2 lbs/acre
Gardner Saltbush	Atriplex Gardneri	1 lbs/acre
Shadscale	Atriplex Confertifolia	1 lbs/acre
Fourwing Saltbush	Atriplex Canescens	1 lbs/acre
Scarlet Globernallow	Sphaeralcea Conccinea	0.20 lbs/acre
Forage Kochia	Kochia Prostrata	0.20 lbs/acre

Details of the On-Site Inspection

The proposed Sand Wash Federal R-31-8-17 was on-sited on 6/11/08. The following were present; Kevan Stevens (Newfield Production), Michael Cutler (Bureau of Land Management), Brandon McDonald (Bureau of Land Management), and James Herford (Bureau of Land Management). Weather conditions were clear and ground cover was 100% open.

LESSEE'S OR OPERATORS REPRESENTATIVE AND CERTIFICATION

<u>Representative</u>

Name:

Dave Allred

Address:

Route #3 Box 3630

Myton, UT 84052

Telephone:

(435) 646-3721

Certification

Please be advised that NEWFIELD PRODUCTION COMPANY is considered to be the operator of well #R-31-8-17 NW/SE Section 31, Township 8S, Range 17E: Lease UTU-74869 Duchesne County, Utah: and is responsible under the terms and conditions of the lease for the operations conducted upon the leased lands. Bond coverage is provided by, Federal Bond #WYB000493.

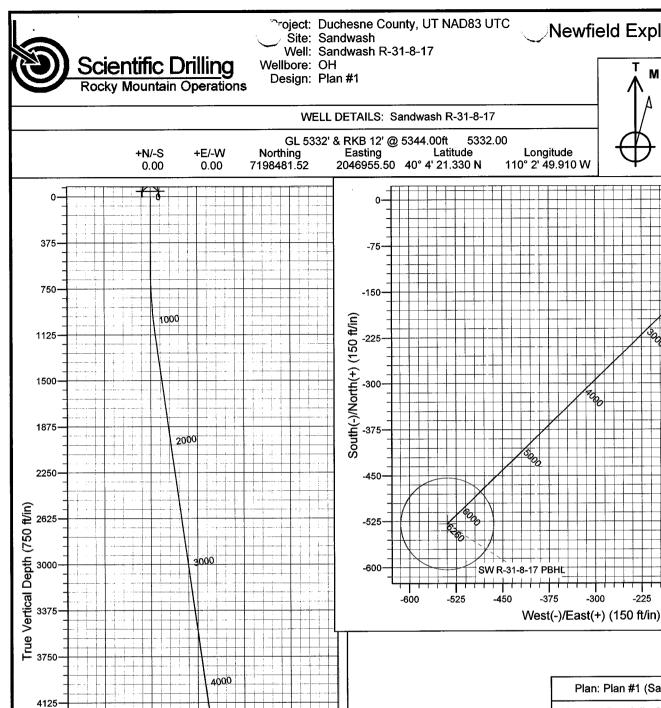
I hereby certify that the proposed drill site and access route have been inspected, and I am familiar with the conditions which currently exist; that the statements made in this plan are true and correct to the best of my knowledge; and that the work associated with the operations proposed here will be performed by Newfield Production Company and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

7/14/08
Date

Mandie Crozier

Regulatory Specialist

Newfield Production Company



1500

4500

4875

5250

5625

6000

SW R-31-8-17 PBHL

Vertical Section at 225.58° (750 ft/in)

Newfield Exploration Co.

Azimuths to True North Magnetic North: 11.67 Magnetic Field Strength: 52603.3snT

Dip Angle: 65.90 Date: 2008-07-1 Model: IGRF2005-1

Plan: Plan #1 (Sandwash R-31-8-17/OH) Date: 2008-07-13 Created By: Julie Cruse

-150

-75

Geodetic System: US State Plane 1983 Datum: North American Datum 1983 Ellipsoid: GRS 1980 Zone: Utah Central Zone Location:

PROJECT DETAILS: Duchesne County, UT NAD83 UTC

System Datum: Mean Sea Level Local North: True

SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	
1131.40									
6311.76	7.97	225.58	6260.00	-528.63	-539.44	0.00	0.00	755.28	SW R-31-8-17 PBHL

Newfield Exploration Co.

Duchesne County, UT NAD83 UTC Sandwash Sandwash R-31-8-17 OH

Plan: Plan #1

Standard Planning Report

13 July, 2008

Scientific Drilling

Planning Report

Database:

EDM 2003.16 Multi-User Db

Company: Project:

Newfield Exploration Co. Duchesne County, UT NAD83 UTC

Site:

Sandwash

Sandwash R-31-8-17 Well:

Wellbore: Design:

ОН Plan #1 Local Co-ordinate Reference:

TVD Reference: MD Reference:

Well Sandwash R-31-8-17 GL 5332' & RKB 12' @ 5344.00ft GL 5332' & RKB 12' @ 5344.00ft

North Reference:

Survey Calculation Method:

True

Minimum Curvature

Project

Duchesne County, UT NAD83 UTC

Map System:

US State Plane 1983

Geo Datum: Map Zone:

North American Datum 1983 Utah Central Zone

System Datum:

Mean Sea Level

Site

Sandwash,

Site Position:

Lat/Long

Northing: Easting:

7,206,453.46 ft 2,044,374.75ft Latitude: Longitude:

40° 5' 40.520 N 110° 3' 21.450 W

Position Uncertainty:

0.00 ft

Slot Radius:

Grid Convergence:

0.93°

Well

From:

Sandwash R-31-8-17, 1973' FSL 2055' FEL Sec 31 T8S R17E

Well Position

+N/-S +E/-W 0.00 ft 0.00 ft Northing: Easting:

7,198,481.52 ft 2,046,955.50 ft Latitude: Longitude: 40° 4' 21.330 N

Position Uncertainty

0.00 ft

Wellhead Elevation:

ft

Ground Level:

110° 2' 49.910 W 5,332.00 ft

Wellbore

ОН

Magnetics

Model Name

Sample Date

Declination (°)

Dip Angle (°)

Field Strength

(nT)

IGRF2005-10

2008-07-13

11.67

65.90

52,603

Design

Plan #1

Audit Notes:

Version:

Phase:

PLAN

Tie On Depth:

0.00

Vertical Section:

Depth From (TVD) (ft)

0.00

+N/-S (ft) 0.00

+E/-W (ft) 0.00

Direction (°) 225.58

Plan Sections Turn Dogleg Build Vertical Measured TFO +N/-S +F/-W Rate Rate Rate Inclination Azimuth Depth Depth (°/100ft) (°/100ft) Target (°/100ft) (°) (ft) (ft) (ft) (ft) (°) (°) 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 600 00 600.00 0.00 225.58 225.58 -25.83 -26.36 1.50 1.50 0.00 1,129.69 1,131.40 7.97 0.00 SW R-31-8-17 PBHL -539.44 0.00 0.00 0.00 6,260.00 -528.63 225.58 6,311.76 7.97

Page 2

Scientific Drilling

Planning Report

Database: Company: EDM 2003.16 Multi-User Db

Project:

Newfield Exploration Co. Duchesne County, UT NAD83 UTC

Site: Well: Sandwash Sandwash R-31-8-17

Wellbore: Design: OH Plan #1 Local Co-ordinate Reference:

TVD Reference: MD Reference:

North Reference:

Survey Calculation Method:

Well Sandwash R-31-8-17

GL 5332' & RKB 12' @ 5344.00ft GL 5332' & RKB 12' @ 5344.00ft

True

Minimum Curvature

Survey									
Measured Depth	Inclination	Azimuth	Vertical Depth	+N/-S	+E/-W	Vertical Section	Dogleg Rate	Build Rate	Turn Rate
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(°/100ft)	(°/100ft)	(°/100ft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00				0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00				0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00			
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00			0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00				1.50	1.50	0.00
700.00	1.50	225.58	699.99	-0.92	-0.93	1.31			0.00
800.00	3.00	225.58	799.91	-3.66	-3.74	5.23	1.50	1.50	
900.00	4.50	225.58	899.69	-8.24	-8.41	11.77	1.50	1.50	0.00
		005 50	000.07	14.65	14.05	20.92	1.50	1.50	0.00
1,000.00	6.00	225.58	999.27	-14.65	-14.95				0.00
1,100.00	7.50	225.58	1,098.57	-22.87	-23.34	32.68	1.50	1.50	
1,131.40	7.97	225.58	1,129.69	-25.83	-26.36	36.91	1.50	1.50	0.00
1,200.00	7.97	225.58	1,197.62	-32.49	-33.15	46.42	0.00	0.00	0.00
1,300.00	7.97	225.58	1,296.66	-42.19	-43.06	60.28	0.00	0.00	0.00
			·					0.00	0.00
1,400.00	7.97	225.58	1,395.69	-51.90	-52.96	74.15	0.00	0.00	0.00
1,500.00	7.97	225.58	1,494.73	-61.61	-62.87	88.02	0.00	0.00	0.00
1,600.00	7.97	225.58	1,593.76	-71.31	-72.77	101.89	0.00	0.00	0.00
1,700.00	7.97	225.58	1,692.79	-81.02	-82.67	115.75	0.00	0.00	0.00
1,800.00	7.97	225.58	1,791.83	-90.72	-92.58	129.62	0.00	0.00	0.00
1,000.00	1.51	223.30	1,731.00	-00.72					
1,900.00	7.97	225.58	1,890.86	-100.43	-102.48	143.49	0.00	0.00	0.00
2,000.00	7.97	225.58	1,989.90	-110.14	-112.39	157.36	0.00	0.00	0.00
2,100.00	7.97	225.58	2,088.93	-119.84	-122.29	171.22	0.00	0.00	0.00
•	7.97	225.58	2,187.96	-129.55	-132.20	185.09	0.00	0.00	0.00
2,200.00				-139.25	-142.10	198.96	0.00	0.00	0.00
2,300.00	7.97	225.58	2,287.00	-139.23	-142.10	190.90	0.00	0.00	
2,400.00	7.97	225.58	2,386.03	-148.96	-152.01	212.82	0.00	0.00	0.00
•	7.97	225.58	2,485.06	-158.66	-161.91	226.69	0.00	0.00	0.00
2,500.00				-168.37	-171.81	240.56	0.00	0.00	0.00
2,600.00	7.97	225.58	2,584.10			254.43	0.00	0.00	0.00
2,700.00	7.97	225.58	2,683.13	-178.08	-181.72				0.00
2,800.00	7.97	225.58	2,782.17	-187.78	-191.62	268.29	0.00	0.00	0.00
2 200 20	7.97	225.58	2,881.20	-197.49	-201.53	282.16	0.00	0.00	0.00
2,900.00					-211.43	296.03	0.00	0.00	0.00
3,000.00	7.97	225.58	2,980.23	-207.19			0.00	0.00	0.00
3,100.00	7.97	225.58	3,079.27	-216.90	-221.34	309.90			0.00
3,200.00	7.97	225.58	3,178.30	-226.61	-231.24	323.76	0.00	0.00	
3,300.00	7.97	225.58	3,277.34	-236.31	-241.15	337.63	0.00	0.00	0.00
•			0.670.07	040.00	054.05	351.50	0.00	0.00	0.00
3,400.00	7.97	225.58	3,376.37	-246.02	-251.05				0.00
3,500.00	7.97	225.58	3,475.40	-255.72	-260.95	365.36	0.00	0.00	
3,600.00	7.97	225.58	3,574.44	-265.43	-270.86	379.23	0.00	0.00	0.00
3,700.00	7.97	225.58	3,673.47	-275.14	-280.76	393.10	0.00	0.00	0.00
3,800.00	7.97	225.58	3,772.50	-284.84	-290.67	406.97	0.00	0.00	0.00
3,300.00	1.31		•					0.00	0.00
3,900.00	7.97	225.58	3,871.54	-294.55	-300.57	420.83	0.00	0.00	0.00
4,000.00	7.97	225.58	3,970.57	-304.25	-310.48	434.70	0.00	0.00	0.00
4,100.00	7.97	225.58	4,069.61	-313.96	-320.38	448.57	0.00	0.00	0.00
4,200.00	7.97	225.58	4,168.64	-323.66	-330.28	462.44	0.00	0.00	0.00
				-333.37	-340.19	476.30	0.00	0.00	0.00
4,300.00	7.97	225.58	4,267.67	-000.07	-3-0.18				
4,400.00	7.97	225.58	4,366.71	-343.08	-350.09	490.17	0.00	0.00	0.00
4,500.00	7.97	225.58	4,465.74	-352.78	-360.00	504.04	0.00	0.00	0.00
				-362.49	-369.90	517.90	0.00	0.00	0.00
4,600.00	7.97	225.58	4,564.77			531.77	0.00	0.00	0.00
4,700.00	7.97	225.58	4,663.81	-372.19	-379.81				0.00
4,800.00	7.97	225.58	4,762.84	-381.90	-389.71	545.64	0.00	0.00	0.00
	3 .07	005.50	4 964 99	-391.61	-399.62	559.51	0.00	0.00	0.00
4,900.00	7.97	225.58	4,861.88			573.37	0.00	0.00	0.00
5,000.00	7.97	225.58	4,960.91	-401.31	-409.52				0.00
5,100.00	7.97	225.58	5,059.94	-411.02	-419.42	587.24	0.00	0.00	0.00

Scientific Drilling

Planning Report

Database: Company: EDM 2003.16 Multi-User Db Newfield Exploration Co.

Project:

Duchesne County, UT NAD83 UTC

Site: Well: Sandwash

Sandwash R-31-8-17

Wellbore: Design:

ОН Plan #1 Local Co-ordinate Reference:

TVD Reference:

MD Reference: North Reference:

Survey Calculation Method:

Well Sandwash R-31-8-17

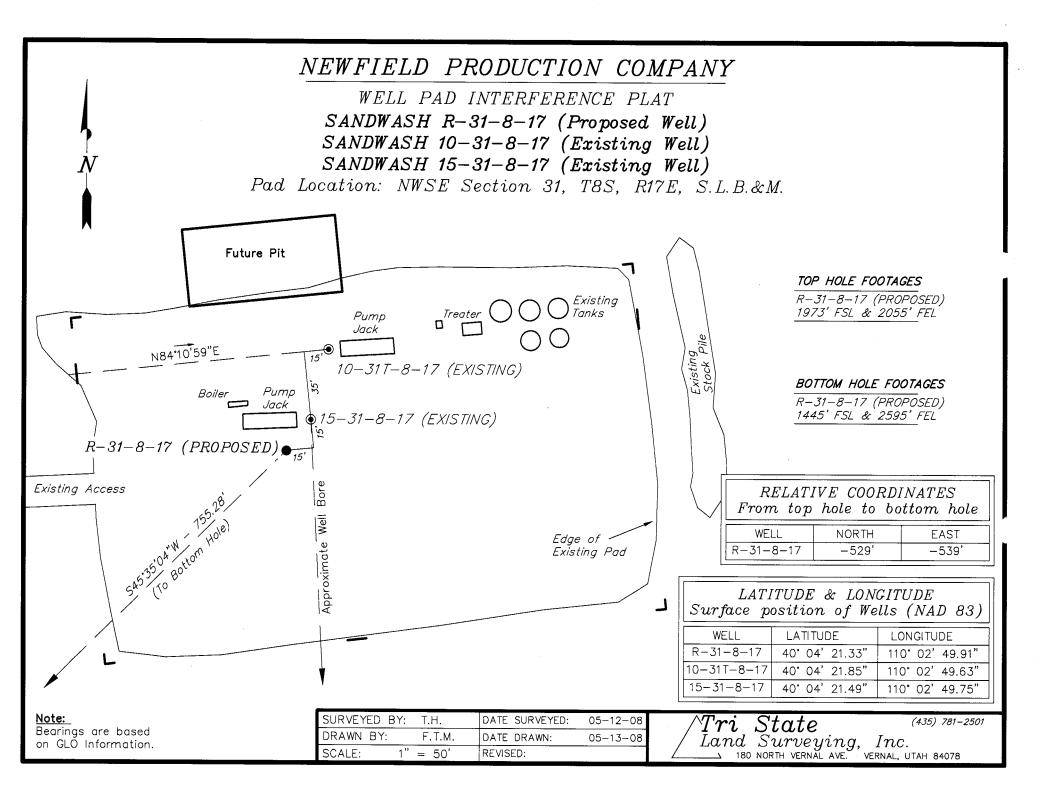
GL 5332' & RKB 12' @ 5344.00ft GL 5332' & RKB 12' @ 5344.00ft

True

Minimum Curvature

anned Survey					eneger vis				
Measured Depth (ft)	inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
5,300.00	7.97	225.58	5,258.01	-430.43	-439.23	614.98	0.00	0.00	0.00
5,400.00	7.97	225.58	5,357.05	-440.14	-449.14	628.84	0.00	0.00	0.00
5,500.00	7.97	225.58	5,456.08	-449.84	-459.04	642.71	0.00	0.00	0.00
5,600.00	7.97	225.58	5,555.11	-459.55	-468.95	656.58	0.00	0.00	0.00
5,700.00	7.97	225.58	5,654.15	-469.25	-478.85	670.45	0.00	0.00	0.00
5,800.00	7.97	225.58	5,753.18	-478.96	-488.76	684.31	0.00	0.00	0.00
5.900.00	7.97	225.58	5,852.21	-488.66	-498.66	698.18	0.00	0.00	0.00
6,000.00	7.97	225.58	5,951.25	-498.37	-508.56	712.05	0.00	0.00	0.00
6,100.00	7.97	225.58	6,050.28	-508.08	-518.47	725.91	0.00	0.00	0.00
6,200.00	7.97	225.58	6,149.32	-517.78	-528.37	739.78	0.00	0.00	0.00
6,300.00	7.97	225.58	6,248.35	-527.49	-538.28	753.65	0.00	0.00	0.00
6,311.76	7.97	225.58	6,260.00	-528.63	-539.44	755.28	0.00	0.00	0.00

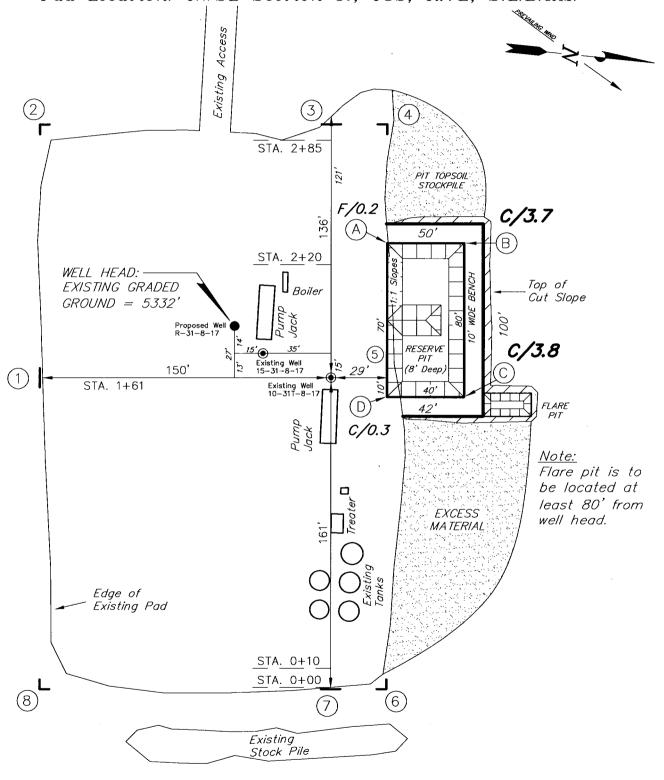
Targets									
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
SW R-31-8-17 PBHL - plan hits target cer - Circle (radius 75.0		0.00	6,260.00	-528.63	-539.44	7,197,944.20	2,046,424.72	40° 4' 16.105 N	110° 2' 56.849 W



NEWFIELD PRODUCTION COMPANY

SANDWASH R-31-8-17 (Proposed Well) SANDWASH 10-31-8-17 (Existing Well) SANDWASH 15-31-8-17 (Existing Well)

Pad Location: NWSE Section 31, T8S, R17E, S.L.B.&M.



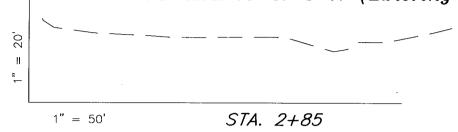
SURVEYED BY: T.H.	DATE SURVEYED:	05-12-08	\^Tri_St
DRAWN BY: F.T.M.	DATE DRAWN:	05-13-08	/ Land Si
SCALE: $1" = 50'$	REVISED:		180 NOF

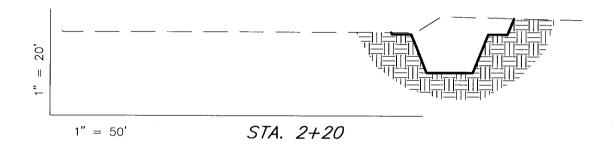
 $egin{array}{lll} egin{array}{lll} Tri & State & ^{(435)} & ^{781-2501} \ Land & Surveying, & Inc. \ ____ & 180 & NORTH & VERNAL & VERNAL, UTAH & 84078 \end{array}$

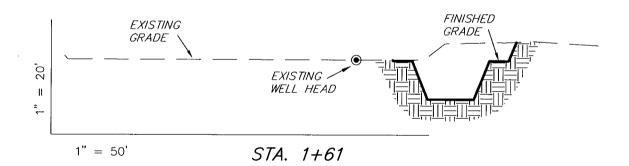
NEW FIELD PRODUCTION COMPANY

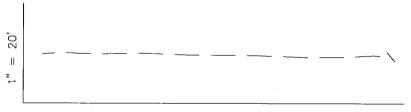
CROSS SECTIONS

SANDWASH R-31-8-17 (Proposed Well) SANDWASH 10-31-8-17 (Existing Well) SANDWASH 15-31-8-17 (Existing Well)









1" = 50'

UNLESS OTHERWISE NOTED CUT SLOPES ARE AT 1:1 FILL SLOPES ARE AT 1.5:1

NOTE:

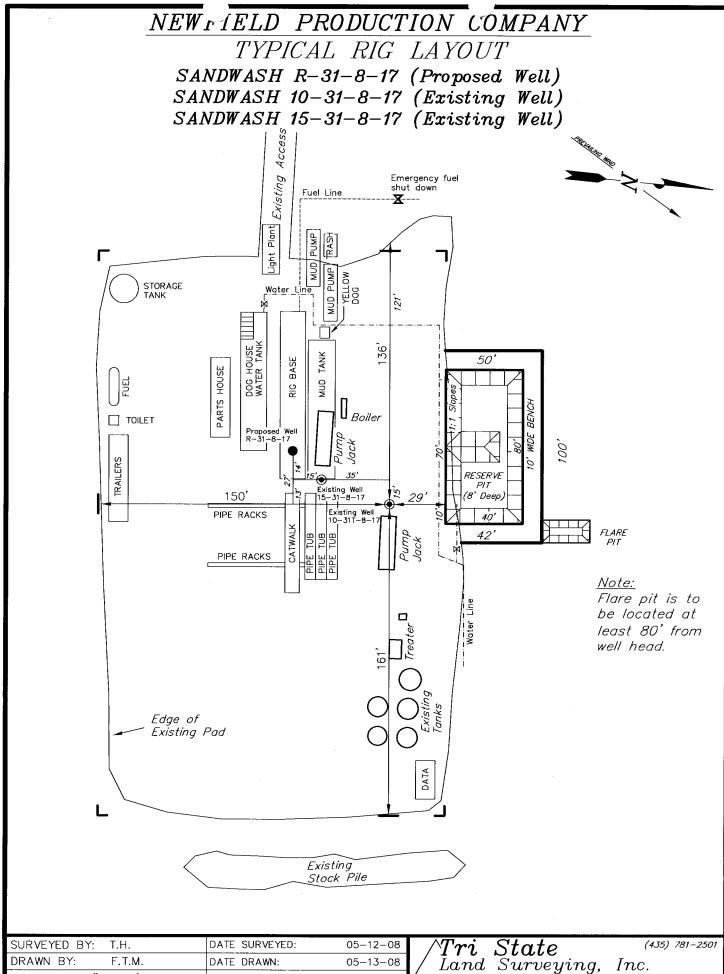
STA. 0+10

ESTIMATED			
(No Shrink or sv	vell adjustme	nts have	been used)
(Expres	ssed in Cubic	Yards)	

L			. ,	
ITEM	CUT	FILL	6" TOPSOIL	EXCESS
PAD	650	10	Topsoil is not included	640
PIT	640	0	in Pad Cut	640
TOTALS	1,290	10	130	1,280

SURVEYED BY: T.H.	DATE SURVEYED:	05-12-08
DRAWN BY: F.T.M.	DATE DRAWN:	05-13-08
SCALF: $1'' = 50'$	REVISED:	

∕Tri State	(435) 7812501
/ Land Surveying,	Inc.
180 NORTH VERNAL AVE. VER	



SURVEYED BY: T.H.	DA	ATE SURVEYED: 05	5-12-08 77	ri State	(435) 781–2501
DRAWN BY: F.T.	M. DA	ATE DRAWN: 05	$\tilde{L}a$	nd Survey	ing. Inc.
SCALE: $1" = 50$	O' RE'	VISED:			AVE. VERNAL, UTAH 84078

Newfield Production Company Proposed Site Facility Diagram

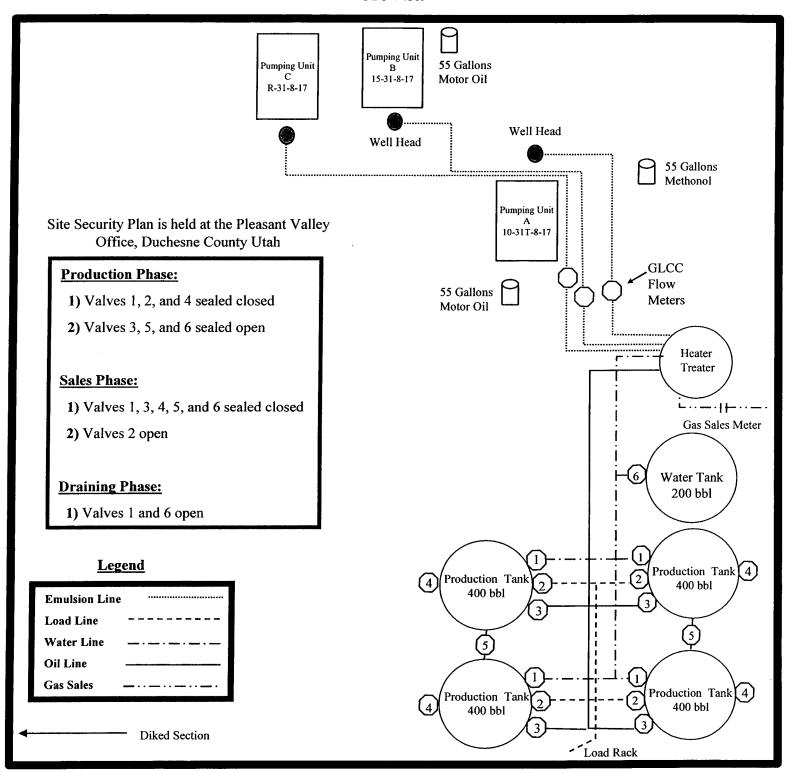
Sandwash Federal R-31-8-17

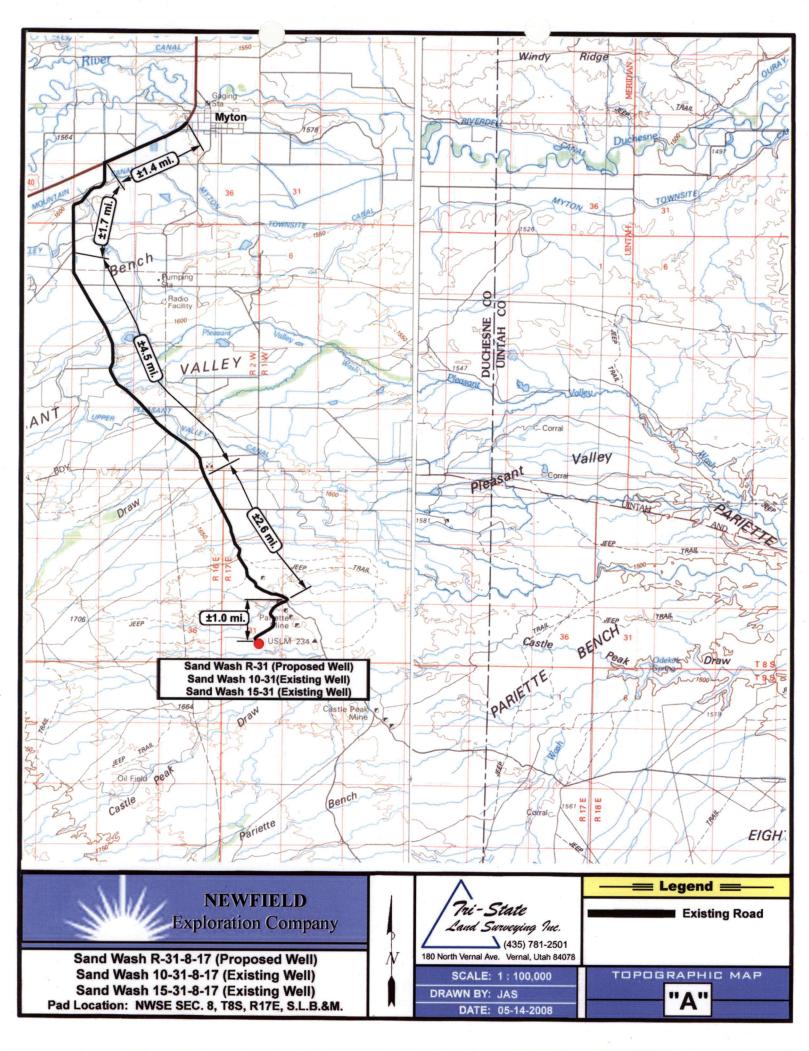
From the 10-31T-8-17 Location

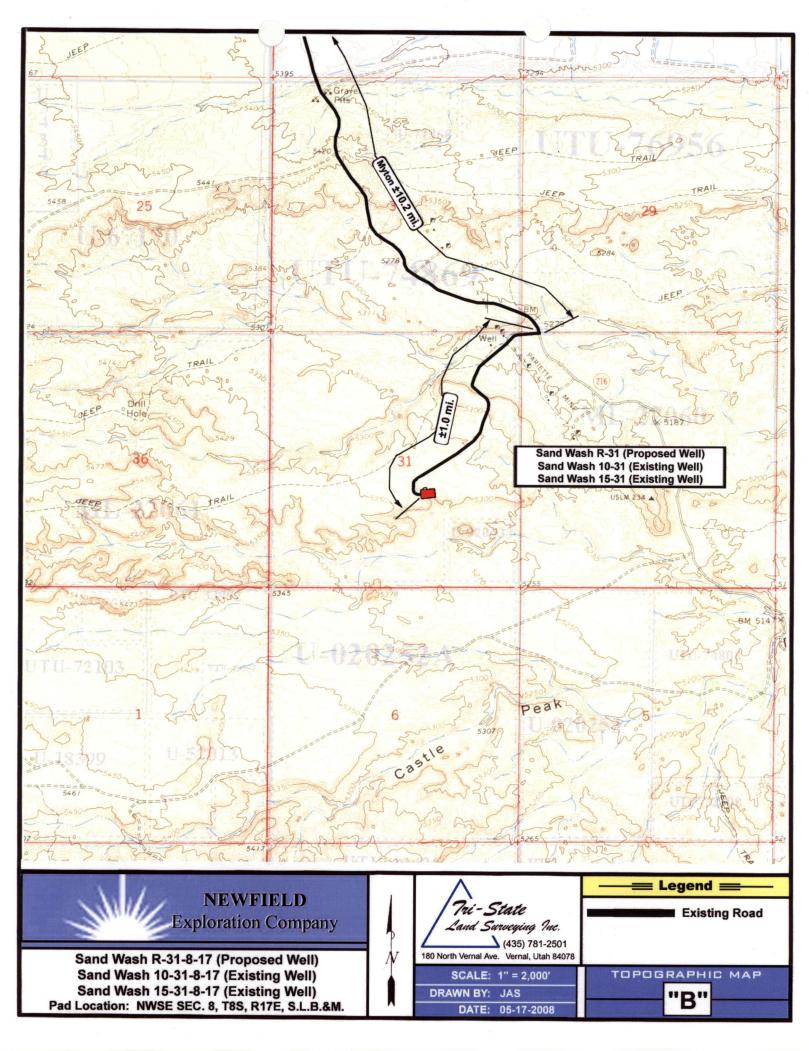
NW/SE Sec. 31, T8S, 17E

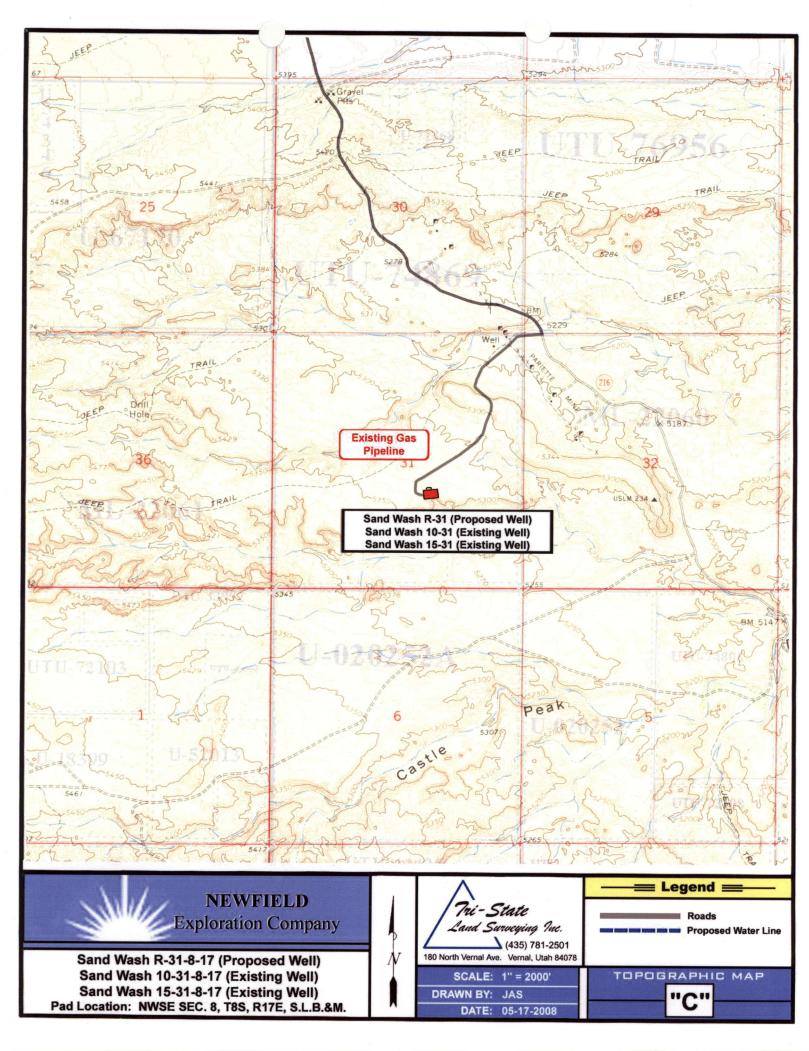
Duchesne County, Utah

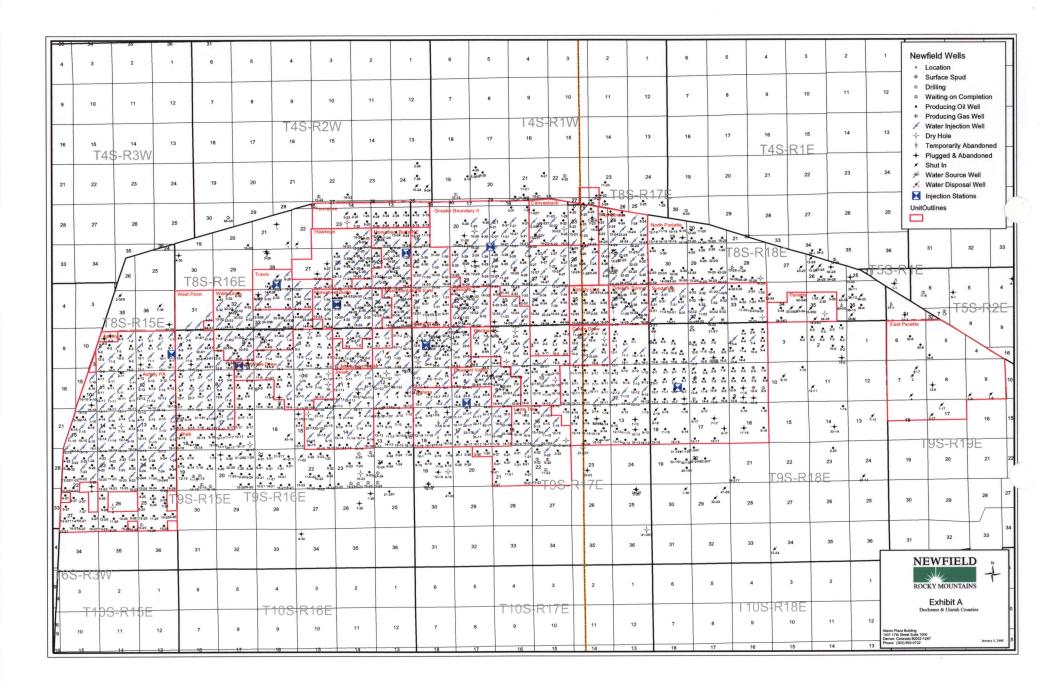
UTU-74869

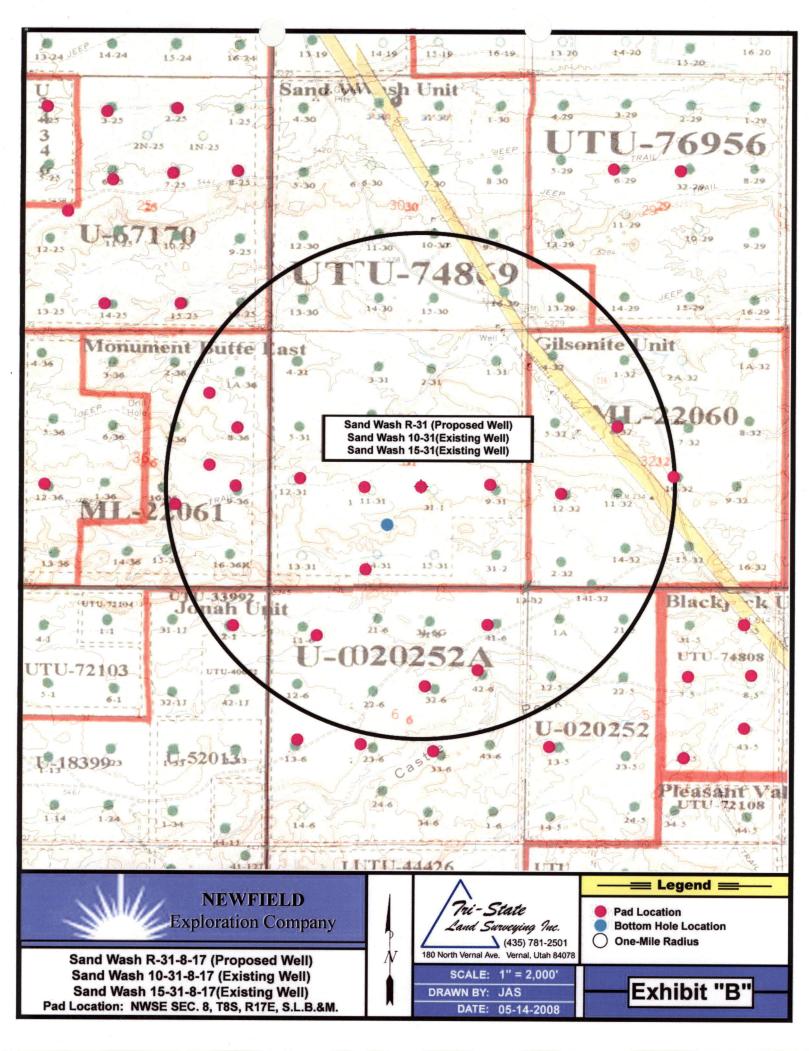












2-M SYSTEM

Blowout Prevention Equipment Systems

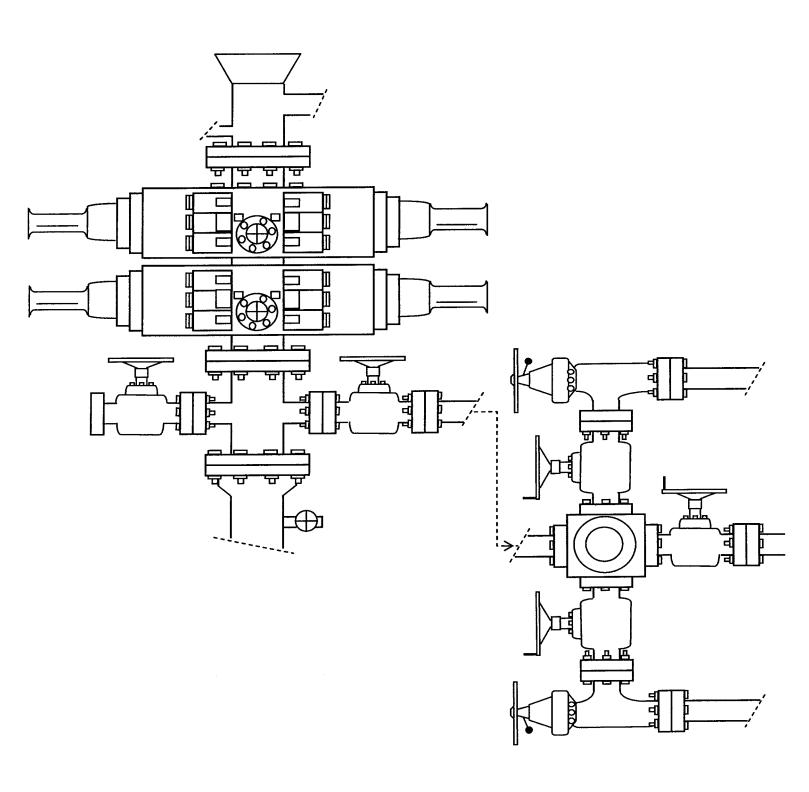
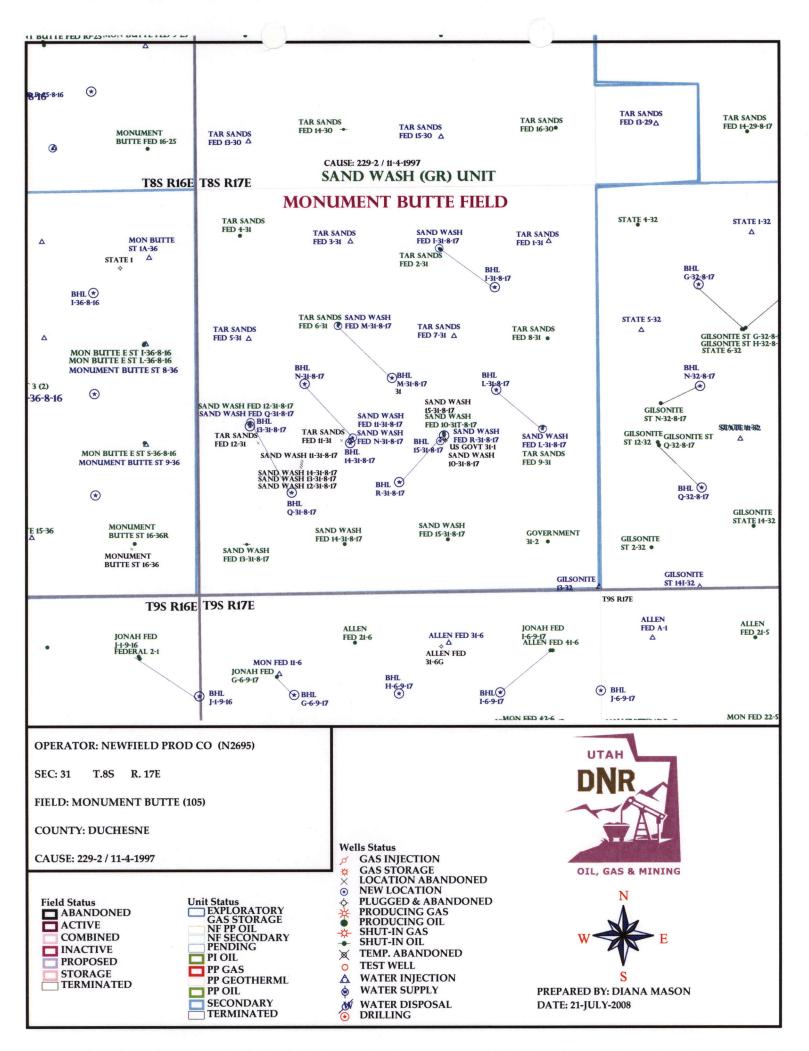


EXHIBIT C

WORKSHEET APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 07/17/2008	API NO. ASSIGNED: 43-013-34033				
WELL NAME: SAND WASH FED R-31-8-17 OPERATOR: NEWFIELD PRODUCTION (N2695 CONTACT: MANDIE CROZIER	PHONE NUMBER: 435-646-3721				
PROPOSED LOCATION:	INSPECT LOCATN BY: / /				
NWSE 31 080S 170E	Tech Review Initials Date				
SURFACE: 1973 FSL 2055 FEL BOTTOM: 1445 FSL 2595 FEL	Engineering				
COUNTY: DUCHESNE	Geology				
LATITUDE: 40.07257 LONGITUDE: -110.0464 UTM SURF EASTINGS: 581316 NORTHINGS: 4436	037 Surface				
FIELD NAME: MONUMENT BUTTE (105 LEASE TYPE: 1 - Federal LEASE NUMBER: UTU-74869 SURFACE OWNER: 1 - Federal					
Plat Bond: Fed[1] Ind[] Sta[] Fee[] (No. WYB000493) Potash (Y/N) Potash (Y/N) Oil Shale 190-5 (B) or 190-3 or 190-13 Water Permit (No. 43-10136) RDCC Review (Y/N) (Date:) MH Fee Surf Agreement (Y/N) PAH Intent to Commingle (Y/N)	LOCATION AND SITING: R649-2-3. Unit: SAND WASH (GRRV) R649-3-2. General				
COMMENTS:					
STIPULATIONS:					



United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Utah State Office
P.O. Box 45155
Salt Lake City, Utah 84145-0155

RECEIVED

IN REPLY REFER TO: 3160 (UT-922) JUL 2 2 2008

DIV. OF OIL, GAS & MINING

July 21, 2008

Memorandum

To:

Assistant District Manager Minerals, Vernal District

From:

Michael Coulthard, Petroleum Engineer

Subject:

2008 Plan of Development Sand Wash Unit,

Duchesne County, Utah.

Pursuant to email between Diana Whitney, Division of Oil, Gas and Mining, and Mickey Coulthard, Utah State Office, Bureau of Land Management, the following wells are planned for calendar year 2008 within the Sand Wash Unit, Duchesne County, Utah.

API#

WELL NAME

LOCATION

(Proposed PZ Green River)

43-013-34031 Sand Wash Fed M-31-8-17 Sec 31 T08S R17E 1802 FNL 1827 FWL BHL Sec 31 T08S R17E 2805 FSL 2670 FEL

43-013-34032 Sand Wash Fed N-31-8-17 Sec 31 T08S R17E 2034 FSL 2002 FWL BHL Sec 31 T08S R17E 2556 FNL 1385 FWL

43-013-34033 Sand Wash Fed R-31-8-17 Sec 31 T08S R17E 1973 FSL 2055 FEL BHL Sec 31 T08S R17E 1445 FSL 2595 FEL

We have no objections to permitting the well so long as the unit operator receives an exception to the locating and siting requirements of the State of Utah (R649-3-2).

/s/ Michael L. Coulthard

bcc: File - Sand Wash Unit
 Division of Oil Gas and Mining
 Central Files
 Agr. Sec. Chron
 Fluid Chron

MCoulthard:mc:7-21-08



July 23, 2008

State of Utah, Division of Oil, Gas and Mining ATTN: Diana Mason PO Box 145801 Salt Lake City, UT 84114-5801

RE:

Directional Drilling

Sand Wash Federal R-31-8-17

Sand Wash Unit UTU-76788X

Surface Hole:

T8S R17E, Section 31: NWSE

1973' FSL 2055' FEL

Bottom Hole:

T8S R17E, Section 31

1445' FSL 2595' FEL

Duchesne County, Utah

Dear Ms. Mason;

Pursuant to the filing of Newfield Production Company's ("NPC") Application for Permit to Drill dated July 14, 2008, a copy of which is attached, for the above referenced well, and in accordance with Oil and Gas Conservation Rule R649-3-11, NPC hereby submits this letter as notice of our intention to directionally drill this well.

The surface hole location and bottom hole location of this well are both within the boundaries of the Sand Wash Unit UTU-76788X. Newfield certifies that it is the Sand Wash Unit Operator and all lands within 460 feet of the entire directional well bore are within the Sand Wash Unit.

NPC is permitting this well as a directional well in order to minimize surface disturbance. By directionally drilling from the referenced surface location, NPC will be able to utilize the existing roads and pipelines in this area.

NPC hereby requests our application for permit to drill be granted pursuant to R649-3-11. If you have any questions or require further information, please do not hesitate to contact the undersigned at 303-382-4444 or by email at reveland@newfield.com. Your consideration of this matter is greatly appreciated.

Sincerely,

Roxann Eveland Land Associate

Royani Eveland

RECEIVED
JUL 2 5 2008

DIV. OF OIL, GAS & MINING

Form 3160-3 (September 2001) UNITED STATES				FORM APPROVED OMB No. 1004-0136 Expires January 31, 2004			
DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT				5. Lease Serial No. UTU-74869			
APPLICATION FOR PERMIT TO DRILL OR REENTER				6. If Indian, Allottee or Tribe Name N/A			
la. Type of Work: DRILL REENTE	ck: DRILL REENTER				7. If Unit or CA Agreement, Name and No. Sand Wash Unit		
1b. Type of Well: Soil Well Gas Well Other Single Zone Multiple Zone				Lease Name and Well No. Sand Wash Federal R-31-8-17			
2. Name of Operator Newfield Production Company				9. API Well No.			
3a. Address Route #3 Box 3630, Myton UT 84052	3b. Phone No. (include area (435) 646-3721	a code)		10. Field and Pool, or Exploratory Monument Butte			
Location of Well (Report location clearly and in accordance with At surface NW/SE 1973' FSL 2055' FEL	any State requirements.*)			11. Sec., T., R., M., o		Survey or Area	
At proposed prod. zone 1445' FSL 2595' FEL				Sec. 31, T8S R17E			
14. Distance in miles and direction from nearest town or post office* Approximatley 11.2 miles south of Myton, Utah			, up. u.	12. County or Parish Duchesne		13. State	
 Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig, unit line, if any) Approx. 1445' thee, 1445' thunt 	16. No. of Acres in lease		17. Spacin	cing Unit dedicated to this well 20 Acres			
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. Approx. 1167'			BIA Bond No. on file				
applied for, on this lease, ft. Approx. 1167' 21. Elevations (Show whether DF, KDB, RT, GL, etc.)			VYB000493 23. Estimated duration				
5332' GL	22. Approximate date work will start* 4th Quarter 2008			Approximately seven (7) days from spud to rig release.			
The following, completed in accordance with the requirements of Onshor	24. Attachments	***					
 Well plat certified by a registered surveyor. A Drilling Plan. A Surface Use Plan (if the location is on National Forest System I SUPO shall be filed with the appropriate Forest Service Office). 	4. Bond to Item 20 a Lands, the 5. Operator 6. Such oth	cover the bove). certificat	operation	s unless covered by ar		,	
S. Signature Name (Printed/Typed) Mandie Crozier				Date 7/14/0	10		
Regulatory Specialist	Manale Stoziel				<u>; </u>	10	
I The state of the		lame (Printed/Typed)			Date		
Office					1		
pplication approval does not warrant or certify the the applicant holds legorations thereon. onditions of approval, if any, are attached.	al or equitable title to those r	ights in th	ne subject le	ase which would entitl	e the appli	cant to conduct	
itle 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a tates any false, fictitious or fraudulent statements or representations as to	crime for any person knowing matter within its jurisdict	ngly and	willfully to	make to any departme	nt or agen	cy of the United	
(Instructions on reverse)							

RECEIVED JUL 2 5 2008

T8S, R17E, S.L.B.&M. N89'51'E - 78.20 (G.L.O.) 1998 Aluminun Lot 2 Lot 1 WELL LOCATION: SANDWASH R-31-8-17 Lot 3 ELEV. EXIST. GRADED GROUND = 5332' (C.L.O.) 89'57' Lot 4 2055 (Comp.) **Bottom** of Hole of Hole | 2595' (Comp.) Lot 5 89*59 G.L.O. 18.31 20.00 40.00

N89'58'E - 78.31 (G.L.O.)



= SECTION CORNERS LOCATED

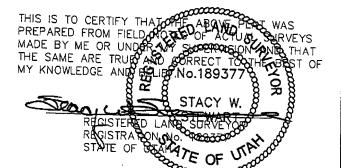
BASIS OF ELEV; U.S.G.S. 7-1/2 min QUAD (MYTON SE) SANDWASH R-31-8-17 (Surface Location) NAD 83 LATITUDE = 40° 04' 21.33" LONGITUDE = 110° 02' 49.91"

NEWFIELD PRODUCTION COMPANY

WELL LOCATION, SANDWASH R-31-8-17, LOCATED AS SHOWN IN THE NW 1/4 SE 1/4 OF SECTION 31, T8S, R17E, S.L.B.&M. DUCHESNE COUNTY, UTAH.



Note: The Proposed Well head bears \$72'06'20"W 2158.91' from the East 1/4 Corner of Section 31.



TRI STATE LAND SURVEYING & CONSULTING 180 NORTH VERNAL AVE. - VERNAL, UTAH 84078 (435) 781-2501

(100) 701 2001				
DATE SURVEYED: 05-12-08	SURVEYED BY: T.H.			
DATE DRAWN: 05-13-08	DRAWN BY: F.T.M.			
REVISED:	SCALE: 1" = 1000'			



State of Utah DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA
Division Director

July 31, 2008

Newfield Production Company Rt. #3, Box 3630 Myton, UT 84052

Re:

Sand Wash Federal R-31-8-17 Well, Surface Location 1973' FSL, 2055' FEL, NW SE,

Sec. 31, T. 8 South, R. 17 East, Bottom Location 1445' FSL, 2595' FEL, NW SE,

Sec. 31, T. 8 South, R. 17 East, Duchesne County, Utah

Gentlemen:

Pursuant to the provisions and requirements of Utah Code Ann.§ 40-6-1 et seq., Utah Administrative Code R649-3-1 et seq., and the attached Conditions of Approval, approval to drill the referenced well is granted.

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date. The API identification number assigned to this well is 43-013-34033.

Sincerely,

Gil Hunt

Associate Director

Stip XLf

pab Enclosures

cc:

Duchesne County Assessor

Bureau of Land Management, Vernal Office



Operator:	Newfield Production Company			
Well Name & Number	Sand Wash Federal R-31-8-17			
API Number:	43-013-34033			
Lease:	UTU-74869			
Surface Location: NW SE_	Sec. 31	T. <u>8 South</u>	R. <u>17 East</u>	
Bottom Location: NW SE	Sec. 31	R. <u>17 East</u>		

Conditions of Approval

1. General

Compliance with the requirements of Utah Admin. R. 649-1 *et seq.*, the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

2. Notification Requirements

Notify the Division within 24 hours of spudding the well.

Contact Carol Daniels at (801) 538-5284

Notify the Division prior to commencing operations to plug and abandon the well.

• Contact Dustin Doucet at (801) 538-5281 (801) 733-0983 home

3. Reporting Requirements

All required reports, forms and submittals will be promptly filed with the Division, including but not limited to the Entity Action Form (Form 6), Report of Water Encountered During Drilling (Form 7), Weekly Progress Reports for drilling and completion operations, and Sundry Notices and Reports on Wells requesting approval of change of plans or other operational actions.

- 4. State approval of this well does not supersede the required federal approval, which must be obtained prior to drilling.
- 5. In accordance with Utah Admin. R.649-3-11, Directional Drilling, the operator shall submit a complete angular deviation and directional survey report to the Division within 30 days following completion of the well.

Form 3160-3 (September 2001) 200 17 17 1 49

FORM APPROVED OMB No. 1004-0136 Expires January 31, 2004

UTU-74869

5. Lease Serial No.

UNITED STATES DIFF OF THE MITERIOR DEPARTMENT OF THE INTERIOR OF LAND MIGHT BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER				6. If Indian, Allottee or Tribe Name N/A		
1a. Type of Work: 🖾 DRILL 🔲 REENTER			7. If Unit or CA Agreement, Name and No. Sand Wash Unit			
1b. Type of Well: Oil Well Gas Well Other	Other Single Zone Multiple Zone			Lease Name and Well No. Sand Wash Federal R-31-8-17		
Name of Operator Newfield Production Company				9. API Well No. 43 613 34	033	
3a. Address	3b. Phone N	o. (include area code)		10. Field and Pool, or Exploratory		
Route #3 Box 3630, Myton UT 84052	(43	5) 646-3721		Monument Butte		
4. Location of Well (Report location clearly and in accordance with any State requirements.*)				11. Sec., T., R., M., or Blk. a	nd Survey or Area	
At surface NW/SE 1973' FSL 2055' FEL At proposed prod. zone 1445' FSL 2595' FEL (16) 5 =				Sec. 31, T8S R17E		
14. Distance in miles and direction from nearest town or post office*				12. County or Parish	13. State	
Approximatley 11.2 miles south of Myton, Utah				Duchesne	UT	
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig, unit line, if any), Approx. 1445' f/lse, 1445' f/lunit			ng Unit dedicated to this well			
(This to hearest urig. unit title, if urij)						
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. Approx. 1167'	19. Proposed Depth 20. 6260'			IA Bond No. on file YB000493		
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 22. Approximate date work will start*		rt*	23. Estimated duration			
		rter 2008	Approximately seven (7) days from spud to rig release.		d to rig release.	
	24. Atta	chments				
The following, completed in accordance with the requirements of Onshor	re Oil and Gas	Order No.1, shall be at	tached to this	form:		
 Well plat certified by a registered surveyor. A Drilling Plan. A Surface Use Plan (if the location is on National Forest System SUPO shall be filed with the appropriate Forest Service Office). 	Lands, the	Item 20 above). 5. Operator certific	ation. specific info	s unless covered by an existing street street street street and/or plans as may		
		: (Printed/Typed) ndie Crozier		Date 7/14/08		
Title						

Regulatory Specialist

Approved by (Signature

Name (Printed/Typed)

Stant Field Manager Title ands & Mineral Resources

Office

warrant or certify the the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to operations thereon. Conditions of approval, if any, are attached.

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

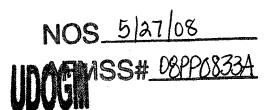
*(Instructions on reverse)

NOTICE OF APPROVAL

RECEIVED

JAN 27 2009

DIV. OF OIL, GAS & MINING





UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT VERNAL FIELD OFFICE

ERNAL FIELD OFFICE VERNAL, UT 84078

(435) 781-4400



CONDITIONS OF APPROVAL FOR APPLICATION FOR PERMIT TO DRILL

Company: Newfield Production Company

Location:

NWSE, Sec. 31, T8S, R17E (S)

NWSE, Sec. 31, T8S, R17E (B)

Well No:

Sand Wash Federal R-31-8-17

Lease No:

UTU-74869

API No:

43-013-34033

Agreement:

Sand Wash Unit

Title	Name	Office Phone Number	Cell Phone Number
Petroleum Engineer:	Matt Baker	(435) 781-4490	(435) 828-4470
Petroleum Engineer:	Michael Lee	(435) 781-4432	(435) 828-7875
Petroleum Engineer:	Ryan Angus	(435) 781-4430	(435) 828-7368
Supervisory Petroleum Technician:	Jamie Sparger	(435) 781-4502	(435) 828-3913
Supervisory NRS:	Karl Wright	(435) 781-4484	
NRS/Enviro Scientist:	Holly Villa	(435) 781-4404	(435) 828-3544
NRS/Enviro Scientist:	James Hereford	(435) 781-3412	(435) 828-3546
NRS/Enviro Scientist:	Chuck Macdonald	(435) 781-4441	(435) 828-7481
NRS/Enviro Scientist:	Dan Emmett	(435) 781-3414	(435) 828-4029
NRS/Enviro Scientist:	Paul Percival	(435) 781-4493	(435) 828-7381
NRS/Enviro Scientist:	Anna Figueroa	(435) 781-3407	(435) 828-3548
NRS/Enviro Scientist:	Verlyn Pindell	(435) 781-3402	(435) 828-3547
NRS/Enviro Scientist:	Nathan Packer	(435) 781-3405	(435) 828-3545
NRS/Enviro Scientist:	David Gordon	(435) 781-4424	
NRS/Enviro Scientist:	Christine Cimiluca	(435) 781-4475	

Fax: (435) 781-3420

A COPY OF THESE CONDITIONS SHALL BE FURNISHED TO YOUR FIELD REPRESENTATIVE TO INSURE COMPLIANCE

All lease and/or unit operations are to be conducted in such a manner that full compliance is made with the applicable laws, regulations (43 CFR Part 3160), and this approved Application for Permit to Drill including Surface and Downhole Conditions of Approval. The operator is considered fully responsible for the actions of his subcontractors. A copy of the approved APD must be on location during construction, drilling, and completion operations. This permit is approved for a two (2) year period, or until lease expiration, whichever occurs first. An additional extension, up to two (2) years, may be applied for by sundry notice prior to expiration.

NOTIFICATION REQUIREMENTS

Location Construction (Notify Environmental Scientist)	-	Forty-Eight (48) hours prior to construction of location and access roads.
Location Completion (Notify Environmental Scientist)	-	Prior to moving on the drilling rig.
Spud Notice (Notify Petroleum Engineer)	-	Twenty-Four (24) hours prior to spudding the well.
Casing String & Cementing (Notify Supv. Petroleum Tech.)	-	Twenty-Four (24) hours prior to running casing and cementing all casing strings.
BOP & Related Equipment Tests (Notify Supv. Petroleum Tech.)	-	Twenty-Four (24) hours prior to initiating pressure tests.
First Production Notice (Notify Petroleum Engineer)		Within Five (5) business days after new well begins or production resumes after well has been off production for more than ninety (90) days.

SURFACE USE PROGRAM CONDITIONS OF APPROVAL (COAs)

- If there is an active Gilsonite mining operation within 2 miles of the well location, operator shall notify the Gilsonite operator at least 48 hours prior to any blasting during construction.
- If paleontological materials are uncovered during construction, the operator is to immediately stop work and contact the Authorized Officer (AO). A determination will be made by the AO as to what mitigation may be necessary for the discovered paleontologic material before construction can continue.

SITE SPECIFIC COAs:

• Refer to Environmental Assessment 2009-0016

DOWNHOLE PROGRAM CONDITIONS OF APPROVAL (COAs)

SITE SPECIFIC DOWNHOLE COAs:

None

All provisions outlined in Onshore Oil & Gas Order #2 Drilling Operations shall be strictly adhered to. The following items are emphasized:

DRILLING/COMPLETION/PRODUCING OPERATING STANDARDS

- The spud date and time shall be reported orally to Vernal Field Office within 24 hours of spudding.
- <u>Notify Vernal Field Office Supervisory Petroleum Engineering Technician at least 24 hours in advance of casing cementing operations and BOPE & casing pressure tests.</u>
- All requirements listed in Onshore Order #2 III. E. Special Drilling Operations are applicable for air drilling of surface hole.
- Blowout prevention equipment (BOPE) shall remain in use until the well is completed or abandoned. Closing unit controls shall remain unobstructed and readily accessible at all times. Choke manifolds shall be located outside of the rig substructure.
- All BOPE components shall be inspected daily and those inspections shall be recorded in the daily drilling report. Components shall be operated and tested as required by Onshore Oil & Gas Order No. 2 to insure good mechanical working order. All BOPE pressure tests shall be performed by a test pump with a chart recorder and **NOT** by the rig pumps. Test shall be reported in the driller's log.
- BOP drills shall be initially conducted by each drilling crew within 24 hours of drilling out from under the surface casing and weekly thereafter as specified in Onshore Oil & Gas Order No. 2.
- Casing pressure tests are required before drilling out from under all casing strings set and cemented in place.
- No aggressive/fresh hard-banded drill pipe shall be used within casing.
- Cement baskets shall not be run on surface casing.
- The operator must report all shows of water or water-bearing sands to the BLM. If flowing water is encountered it must be sampled, analyzed, and a copy of the analyses submitted to the BLM Vernal Field Office.

- The operator must report encounters of all non oil & gas mineral resources (such as Gilsonite, tar sands, oil shale, trona, etc.) to the Vernal Field Office, in writing, within 5 working days of each encounter. Each report shall include the well name/number, well location, date and depth (from KB or GL) of encounter, vertical footage of the encounter and, the name of the person making the report (along with a telephone number) should the BLM need to obtain additional information.
- A complete set of angular deviation and directional surveys of a directional well will be submitted to the Vernal BLM office engineer within 30 days of the completion of the well.
- While actively drilling, chronologic drilling progress reports shall be filed directly with the BLM, Vernal Field Office on a weekly basis in sundry, letter format or e-mail to the Petroleum Engineers until the well is completed.
- A cement bond log (CBL) will be run from the production casing shoe to the <u>top of cement</u> and shall be utilized to determine the bond quality for the production casing. Submit a field copy of the CBL to this office.
- Please submit an electronic copy of all other logs run on this well in LAS format to UT_VN_Welllogs@BLM.gov. This submission will supersede the requirement for submittal of paper logs to the BLM.
- There shall be no deviation from the proposed drilling, completion, and/or workover program as approved. Safe drilling and operating practices must be observed. Any changes in operation must have prior approval from the BLM Vernal Field Office.

OPERATING REQUIREMENT REMINDERS:

- All wells, whether drilling, producing, suspended, or abandoned, shall be identified in accordance with 43 CFR 3162.6. There shall be a sign or marker with the name of the operator, lease serial number, well number, and surveyed description of the well.
- In accordance with 43 CFR 3162.4-3, this well shall be reported on the "Monthly Report of Operations" (Oil and Gas Operations Report ((OGOR)) starting with the month in which operations commence and continue each month until the well is physically plugged and abandoned. This report shall be filed in duplicate, directly with the Minerals Management Service, P.O. Box 17110, Denver, Colorado 80217-0110, or call 1-800-525-7922 (303) 231-3650 for reporting information.
- Should the well be successfully completed for production, the BLM Vernal Field office must be notified when it is placed in a producing status. Such notification will be by written communication and must be received in this office by not later than the fifth business day following the date on which the well is placed on production. The notification shall provide, as a minimum, the following informational items:
 - o Operator name, address, and telephone number.
 - Well name and number.
 - o Well location (1/41/4, Sec., Twn, Rng, and P.M.).
 - Date well was placed in a producing status (date of first production for which royalty will be paid).
 - The nature of the well's production, (i.e., crude oil, or crude oil and casing head gas, or natural gas and entrained liquid hydrocarbons).
 - The Federal or Indian lease prefix and number on which the well is located; otherwise the non-Federal or non-Indian land category, i.e., State or private.
 - o Unit agreement and/or participating area name and number, if applicable.
 - o Communitization agreement number, if applicable.
- Any venting or flaring of gas shall be done in accordance with Notice to Lessees (NTL) 4A and needs prior approval from the BLM Vernal Field Office.
- All undesirable events (fires, accidents, blowouts, spills, discharges) as specified in NTL 3A will be reported to the BLM, Vernal Field Office. Major events, as defined in NTL3A, shall be reported verbally within 24 hours, followed by a written report within 15 days. "Other than Major Events" will be reported in writing within 15 days. "Minor Events" will be reported on the Monthly Report of Operations and Production.

- Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" (BLM Form 3160-4) shall be submitted not later than 30 days after completion of the well or after completion of operations being performed, in accordance with 43 CFR 3162.4-1. Two copies of all logs run, core descriptions, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, shall be filed on BLM Form 3160-4. Submit with the well completion report a geologic report including, at a minimum, formation tops, and a summary and conclusions. Also include deviation surveys, sample descriptions, strip logs, core data, drill stem test data, and results of production tests if performed. Samples (cuttings, fluid, and/or gas) shall be submitted only when requested by the BLM, Vernal Field Office.
- All off-lease storage, off-lease measurement, or commingling on-lease or off-lease, shall have prior written approval from the BLM Vernal Field Office.
- Oil and gas meters shall be calibrated in place prior to any deliveries. The BLM Vernal Field Office Petroleum Engineers will be provided with a date and time for the initial meter calibration and all future meter proving schedules. A copy of the meter calibration reports shall be submitted to the BLM Vernal Field Office. All measurement facilities will conform to the API standards for liquid hydrocarbons and the AGA standards for natural gas measurement. All measurement points shall be identified as the point of sale or allocation for royalty purposes.
- A schematic facilities diagram as required by Onshore Oil & Gas Order No. 3 shall be submitted to the BLM Vernal Field Office within 30 days of installation or first production, whichever occurs first. All site security regulations as specified in Onshore Oil & Gas Order No. 3 shall be adhered to. All product lines entering and leaving hydrocarbon storage tanks will be effectively sealed in accordance with Onshore Oil & Gas Order No. 3.
- Any additional construction, reconstruction, or alterations of facilities, including roads, gathering lines, batteries, etc., which will result in the disturbance of new ground, shall require the filing of a suitable plan and need prior approval of the BLM Vernal Field Office. Emergency approval may be obtained orally, but such approval does not waive the written report requirement.
- No location shall be constructed or moved, no well shall be plugged, and no drilling or workover equipment shall be removed from a well to be placed in a suspended status without prior approval of the BLM Vernal Field Office. If operations are to be suspended for more than 30 days, prior approval of the BLM Vernal Field Office shall be obtained and notification given before resumption of operations.
- Pursuant to Onshore Oil & Gas Order No. 7, this is authorization for pit disposal of water produced from this well for a period of 90 days from the date of initial production. A permanent disposal method must be approved by this office and in operation prior to the end of this 90-day period. In order to meet this deadline, an application for the proposed permanent disposal method shall be submitted along with any necessary water analyses, as soon as possible, but no later than 45 days after the date of first production. Any method of disposal which has not been approved prior to the end of the authorized 90-day period will be considered as an Incident of Noncompliance and will be grounds for issuing a shut-in order until an acceptable manner for disposing of said water is provided and approved by this office.

Page 7 of 7 Well: Sand Wash Fed R-31-8-17 1/14/2009

• Unless the plugging is to take place immediately upon receipt of oral approval, the Field Office Petroleum Engineers must be notified at least 24 hours in advance of the plugging of the well, in order that a representative may witness plugging operations. If a well is suspended or abandoned, all pits must be fenced immediately until they are backfilled. The "Subsequent Report of Abandonment" (Form BLM 3160-5) must be submitted within 30 days after the actual plugging of the well bore, showing location of plugs, amount of cement in each, and amount of casing left in hole, and the current status of the surface restoration.

	STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES		FORM 9
	NG	5.LEASE DESIGNATION AND SERIAL NUMBER: UTU-74869	
	RY NOTICES AND REPORTS O		6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
Do not use this form for propo bottom-hole depth, reenter plu DRILL form for such proposals		7.UNIT or CA AGREEMENT NAME: SAND WASH (GRRV)	
1. TYPE OF WELL Oil Well			8. WELL NAME and NUMBER: SAND WASH FED R-31-8-17
2. NAME OF OPERATOR: NEWFIELD PRODUCTION COM	IPANY		9. API NUMBER: 43013340330000
3. ADDRESS OF OPERATOR: Rt 3 Box 3630 , Myton, UT, 84	435 646-4825 Ext	PHONE NUMBER:	9. FIELD and POOL or WILDCAT: MONUMENT BUTTE
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1973 FSL 2055 FEL			COUNTY: DUCHESNE
QTR/QTR, SECTION, TOWNSHI Qtr/Qtr: NWSE Section: 31	Township: 08.0S Range: 17.0E Meridian: S		STATE: UTAH
11.	CK APPROPRIATE BOXES TO INDICATE	NATURE OF NOTICE, REPORT,	OR OTHER DATA
TYPE OF SUBMISSION		TYPE OF ACTION	
	☐ ACIDIZE ☐	ALTER CASING	☐ CASING REPAIR
NOTICE OF INTENT Approximate date work will start: 7/31/2009	CHANGE TO PREVIOUS PLANS	CHANGE TUBING	CHANGE WELL NAME
	CHANGE WELL STATUS	COMMINGLE PRODUCING FORMATIONS	CONVERT WELL TYPE
SUBSEQUENT REPORT Date of Work Completion:	L DEEPEN	FRACTURE TREAT	☐ NEW CONSTRUCTION
	Degrator Change	PLUG AND ABANDON RECLAMATION OF WELL SITE	L PLUG BACK
SPUD REPORT Date of Spud:	☐ PRODUCTION START OR RESUME ☐ REPERFORATE CURRENT FORMATION	SIDETRACK TO REPAIR WELL	☐ RECOMPLETE DIFFERENT FORMATION ☐ TEMPORARY ABANDON
Date of Spud.	Using Repair	VENT OR FLARE	WATER DISPOSAL
DRILLING REPORT	WATER SHUTOFF	SI TA STATUS EXTENSION	✓ APD EXTENSION
Report Date:	WILDCAT WELL DETERMINATION	OTHER	OTHER:
12 DESCRIPE PROPOSED OR CO			<u>'</u>
	OMPLETED OPERATIONS. Clearly show all perting Is to extend the Permit to Drill th		olumes, etc.
<u>'</u>		,	Approved by the
			Utah Division of Oil, Gas and Mining
			On, Gas and Mining
		D	ate: June 30, 2009
		_	R naciful
		В	A: Dreat Atra
NAME (PLEASE PRINT) Mandie Crozier	PHONE NUMBER 435 646-4825	TITLE Regulatory Tech	
SIGNATURE N/A		DATE 6/29/2009	



The Utah Division of Oil, Gas, and Mining

- State of Utah
- Department of Natural Resources

Electronic Permitting System - Sundry Notices

Request for Permit Extension Validation Well Number 43013340330000

API: 43013340330000

Well Name: SAND WASH FED R-31-8-17

Location: 1973 FSL 2055 FEL QTR NWSE SEC 31 TWNP 080S RNG 170E MER S

Company Permit Issued to: NEWFIELD PRODUCTION COMPANY

Date Original Permit Issued: 7/31/2008

The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not requi

ire revisi	ion. Following is a che	cklist of some items related to the application, which should be verified.
	ted on private land, ha d? 🌘 Yes 🗎 No	s the ownership changed, if so, has the surface agreement been
		n the vicinity of the proposed well which would affect the spacing or ocation? (Yes (No
	ere been any unit or o proposed well? 🔘 Y	ther agreements put in place that could affect the permitting or operation es <a> No
	here been any change the proposed location?	s to the access route including ownership, or rightof- way, which could Y (Yes (No
• Has the	e approved source of v	vater for drilling changed? 🔘 Yes 📵 No
		I changes to the surface location or access route which will require a as discussed at the onsite evaluation? 🗍 Yes 📵 No
• Is bond	ding still in place, whic	Approved by the covers this proposed well? Yes No Utah Division of Oil, Gas and Mining
	Mandie Crozier	Date: 6/29/2009
Title .	Danielakana Tarib Barrara	June 30, 2009

Sign

Title: Regulatory Tech Representing: NEWFIELD PRODUCTION COMPANY

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

FORM APPROVED OMB NO. 1004-0137 Expires: July 31, 2010

	WE	ELL C	OMPL	ETIO	N OR R	ECOMPLET	ION R	EPORT A	ND L	.og			1 '	ase Seri -74869		
la. Type of V	Vell	√ Oi	l Well	□G	as Well	Dry D	Other								Allottee or T	ribe Name
b. Type of C	Completion:		ew Well her:	□ w	ork Over	Deepen D	Plug Bac	k 🗖 Diff.	Resvr.,	•			7. Un		A Agreement	Name and No.
2. Name of O	Operator			PANY					•				8. Le	ase Nar	ne and Well SH R-31-8-	
3. Address	EXPLOI	VATIO!	V COIVII	AIVI				3a. Phone N	io. (incl	ude ar	ea code			I Well		
	1401 17TH S							(435)646-	3721					13-340		-lamatam:
4. Location 6	of Well <i>(Re</i>	port loc	ation cle	arly and	l in accorda	ince with Federa	l requiren	nents) *	P	er	Hs	ω			Pool or Exp	pioratory
At surface	1973' FS	SL & 20	55' FE	L (NW/	SE) SEC.	31, T8S, R17	E (UTU-	-74869)	•		vie		11. S	ec., T., urvey o	R., M., on B r Area SEC.	lock and 31, T8S, R17E
At top pro	d. interval r	eported 1	below 1	543' F	SL & 2505	' FEL (NW/SE) SEC. (31, T8S, R1	7E (U	ITU-7	4869)				or Parish	13. State
At total de	pth 132 3	FSL &	2563' 1	=WL (8	SE/ SW) S	EC. 31, T8S, I	R17E (l	JTU-74869)					HESN		UT
14. Date Spt 01/28/2010				Date T. 2/09/201	D. Reached		16	Date Comp			2010 to Prod.				ns (DF, RKI 344' KB	3, RT, GL)*
18. Total De	pth: MD				19. Plu	g Back T.D.: N	MD 622	8' -149				dge Plug S		MD VD		
21. Type El	ectric & Oth		anical Lo							l v	Was well Was DST		Z No		Yes (Submit Yes (Submit Yes (Submit	report)
23. Casing	and Liner R	ecord (Report a	ll strings	s set in well)				<u> </u>	JII COLIOII	ai Survey:		·	res (Buoline	
Hole Size	Size/Gra		Wt. (#/ft.)		p (MD)	Bottom (MD)	. 1	e Cementer Depth		of Sks of Cer		Slurry V (BBL)		Cem	ent Top*	Amount Pulled
12-1/4"	8-5/8" J-	55 2	4#	0		321'			160 C	LASS	G G					
7-7/8"	5-1/2" J-	55 1	5.5#	0		6267'	<u> </u>		252 P		MLITE			58'		
									454 5	0/30 F	-02			-		· · · · · · · · · · · · · · · · · · ·
;																
	<u> </u>															
24. Tubing Size		Set (MD)) Pac	ker Dept	h (MD)	Size	Depti	a Set (MD)	Packer	Depth	(MD)	Size		Dept	h Set (MD)	Packer Depth (MD)
2-7/8"	ЕОТ@	5950'	TA @	5820'												
25. Producii	ng Intervals Formation			Т.	op	Bottom	26.	Perforation I Perforated In		<u></u>	T 5	ize	No. H	oles		Perf. Status
A) Green F					9	Bottom	+	-5860' CP2			.36"		3		21	
B) Green I	River						5346-	-5494' A1	43 & L	ODC	.34"	;	3		57	
C) Green I							4961	-5070' D2	& C		.34"	;	3		30	
D) Green I	River						4378	-4434' GB4	4 & GB	6	.34"		3		30	
27. Acid, Fr			Cement S	Squeeze,	etc.				mount	and Tu	ype of N	laterial			· · · · · · · · · · · · · · · · · · ·	
5853-5860	Depth Inter	vai		Frac w/	17244#'s	20/40 sand in	144 bb!					atoriai				
5346-5494						s 20/40 sand i						\3 & LOD	C)			
4961-5070)'			Frac w/	45913#'s	20/40 sand in	224 bbl	ls of Lightni	ng 17 i	fluid. ((D2 & 0	S)				
4378-4434	ļ'			Frac w/	44117#'s	20/40 sand in	294 bbl	s of Lightni	ng 171	fluid. ((GB4 &	GB6)				
28. Producti			Fr		lo:1	lo K	Voton	Oil Grav	.:6.	le.		Drodu	tion M	ethod	***	
Date First Produced	Test Date	Hours Tested	Test Prod		Oil BBL		Water BBL	Corr. Al	-	Ga Gr	as ravity				20' x 24' RH	HAC Pump
3-9-10	3-29-10	24	-	→	7	0	4									
	Tbg. Press.	, –	24 F		Oil		Water	Gas/Oil			ell Statu					
Size	Flwg. SI	Press.	Rate	-	BBL	MCF	BBL	Ratio		Р	RODU	CING				
28a. Produc	tion - Interv	al B			L,.											
Date First		Hours	Test		Oil	1 1	Water	Oil Grav		G:		Produ	ction M	ethod		
Produced		Tested	Prod	luction	BBL	MCF	BBL	Corr. A	T I	G	ravity					
	Tbg. Press.		24 H		Oil		Water	Gas/Oil		w	ell Statu	is				
	Flwg. SI	Press.	Rate	.	BBL	MCF F	BBL	Ratio						RE	ECEIN	/ED

^{*(}See instructions and spaces for additional data on page 2)

28h Produ	uction - Inte	rval C										
		Hours	Test	Oil	Gas	Water	Oil Gr		Gas	Production Method		
Produced		Tested	Production	BBL	MCF	BBL	Corr. A	API	Gravity			
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas/Oi Ratio	il	Well Status			
10a Drode	uction - Inte	nul D		<u> </u>					1			
		Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gr Corr. A		Gas Gravity	Production Method		
Choke Size	Tbg. Press. Flwg. Sl	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas/O Ratio	il	Well Status			
29. Dispo	sition of Ga	s (Solid, u	used for fuel, ve	ented, etc.	,							
USED FOR							,- ,- ,-					
30. Sumn	nary of Porc	us Zones	(Include Aqu	ifers):					31. Formati	ion (Log) Markers		
Show a includi recove	ng depth in	t zones of terval test	porosity and c ed, cushion use	ontents thed, time to	nereof: Cored ool open, flow	intervals and a ring and shut-in	ıll drill-stem ı pressures a	n tests, and	GEOLOG	ICAL MARKERS		
					-N-1-					M		Тор
Fon	mation	Тор	Bottom		De:	scriptions, Cont	tents, etc.		1	Name		Meas. Depth
									GARDEN GL GARDEN GL		3876' 4090'	
									GARDEN GU POINT 3	JLCH 2	4196' 4469'	
									X MRKR Y MRKR		4707' 4746'	
									DOUGALS O	CREEK MRK ATE MRK	4871' 5112'	
									B LIMESTON CASTLE PE		5231' 5741'	
									BASAL CAR	BONATE	6164'	
32. Addi	tional remai	ks (includ	de plugging pro	sceume).								
33. Indic	ate which it	ems have	been attached	by placin	g a check in the	ne appropriate b	boxes:					
☐ Ele	ectrical/Mecl	nanical Lo	gs (1 full set rec	ı'd.)	[Geologic Rep	ort	DST Re	port	✓ Directional Survey		
			ng and cement v		_	Core Analysis		Other:	Drilling Daily	Activity		
34. I here	eby certify t	hat the fo	regoing and at	tached inf	ormation is co	omplete and cor	rrect as dete	ermined from	n all available	records (see attached instruction	ons)*	
			ucy Chavez						ative Assista			
	Signature	Ju		3	1920		Date _	04/05/201	0			_
Title 18 U	J.S.C. Secti	on 1001 a udulent st	nd Title 43 U.s	S.C. Secti presentati	on 1212, mak ons as to any	e it a crime for matter within it	any person ts jurisdiction	knowingly on.	and willfully t	o make to any department or ag		
	ed on nage 3										(1	Form 3160-4, page 2

(Continued on page 3)



NEWFIELD EXPLORATION

USGS Myton SW (UT) SECTION 31 T8S R17E R-31-8-17

Wellbore #1

Design: Wellbore #1

Standard Survey Report

09 February, 2010

NEWFIELD

HATHAWAYBURNHAM

Survey Report

Company:

NEWFIELD EXPLORATION

Project:

USGS Myton SW (UT)

Site: Well: **SECTION 31 T8S R17E**

Wellbore:

R-31-8-17

Design:

Wellbore #1 Wellbore #1 Local Co-ordinate Reference:

Well R-31-8-17

TVD Reference: MD Reference:

WELL @ 5344.0ft (NEWFIELD RIG) WELL @ 5344.0ft (NEWFIELD RIG)

North Reference:

True

Survey Calculation Method:

Database:

Minimum Curvature EDM 2003.21 Single User Db

Project

USGS Myton SW (UT), DUCHESNE COUNTY, UT, USA

Map System:

US State Plane 1983

North American Datum 1983

System Datum:

Mean Sea Level

Geo Datum:

Map Zone:

Utah Central Zone

Using geodetic scale factor

Site

SECTION 31 T8S R17E, SEC 31 T8S R17E

Site Position:

Lat/Long

Northing: Easting:

7,199,169.00ft

Latitude:

40° 4' 28.063 N

From: **Position Uncertainty:**

0.0 ft

Slot Radius:

2,048,214.00ft

Longitude:

110° 2' 33.522 W

Grid Convergence:

0.93°

Well

R-31-8-17, SHL:LAT 40 04 21.33, LONG -110 02 49.91

Well Position

+N/-S +E/-W 0.0 ft 0.0 ft Northing: Easting:

7,198,467.12 ft 2,046,951.41 ft Latitude: Longitude: 40° 4' 21.330 N

Position Uncertainty

0.0 ft

Wellhead Elevation:

5,344.0 ft

Ground Level:

110° 2' 49.910 W 5.332.0 ft

Wellbore

Wellbore #1

Magnetics

Model Name

Sample Date

Declination (°)

Dip Angle

Field Strength (nT)

IGRF200510

12/31/2009

11.48

(°) 65.87

52.464

Design

Wellbore #1

Audit Notes:

Version:

1.0

Phase:

ACTUAL

Tie On Depth:

0.0

Vertical Section:

Depth From (TVD) (ft)

0.0

+N/-S (ft) 0.0

+E/-W (ft) 0.0

Direction (°) 225.58

Survey Program

From

(ft)

Date 2/9/2010

To (ft)

Survey (Wellbore)

Tool Name

Description

408.0

6,280.0 Survey #1 (Wellbore #1)

MWD

MWD - Standard

_	
Survey	

Measured Depth (ft)	Inclination (°)	Azimuth	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
408.0	0.79	122.60	408.0	-1.5	2.4	-0.6	0.19	0.19	0.00
439.0	0.86	123.04	439.0	-1.8	2.7	-0.7	0.23	0.23	1.42
470.0	0.90	134.99	470.0	-2.1	3.1	-0.8	0.60	0.13	38.55
501.0	1.10	161.64	501.0	-2.5	3.4	-0.7	1.61	0.65	85.97
531.0	1.27	187.59	531.0	-3.1	3.4	-0.3	1.86	0.57	86.50
562.0	1.63	203.15	562.0	-3.9	3.2	0.4	1.71	1.16	50.19
593.0	1.89	209.26	592.9	-4.7	2.8	1.3	1.03	0.84	19.71
623.0	2.11	211.43	622.9	-5.6	2.3	2.3	0.78	0.73	7.23
654.0	2.31	220.71	653.9	-6.6	1.5	3.5	1.32	0.65	29.94
685.0	2.55	230.28	684.9	-7.5	0.6	4.8	1.52	0.77	30.87
716.0	2.75	231.18	715.8	-8.4	-0.5	6.2	0.66	0.65	2.90
746.0	3.12	231.80	745.8	-9.4	-1.7	7.8	1.24	1.23	2.07

NEWFIELD

HATHAWAYBURNHAM

Survey Report

Company:

NEWFIELD EXPLORATION

Project: Site:

USGS Myton SW (UT) SECTION 31 T8S R17E

Well:

R-31-8-17

Wellbore:

Wellbore #1

Design:

Wellbore #1

Local Co-ordinate Reference:

TVD Reference:

MD Reference: North Reference:

Survey Calculation Method:

Database:

Well R-31-8-17

WELL @ 5344.0ft (NEWFIELD RIG)

WELL @ 5344.0ft (NEWFIELD RIG)

Minimum Curvature

EDM 2003.21 Single User Db

Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
777.0	3.67	230.28	776.7	-10.5	-3.1	9.6	1.80	1.77	-4.90
807.0	4.20	229.25	806.7	-11.8	-4.7	11.6	1.78	1.77	-3.43
853.0	4.97	229.10	852.5	-14.2	-7.5	15.3	1.67	1.67	-0.33
898.0	5.65	228.13	897.3	-14.2 -17.0	-7.5 -10.6	19.5	1.52	1.67	-0.33 -2.16
943.0		220.13			-14.0			1.11	-1.02
	6.15		942.1	-20.1		24.1	1.12		
989.0	6.88	226.26	987.8	-23.7	-17.8	29.3	1.62	1.59	-3.07
1,034.0	7.45	226.86	1,032.4	-27.5	-21.9	34.9	1.28	1.27	1.33
1,079.0	7.95	227.65	1,077.0	-31.6	-26.4	40.9	1.14	1.11	1.76
1,124.0	8.68	229.10	1,121.6	-35.9	-31.2	47.4	1.69	1.62	3.22
1,170.0	9.23	229.47	1,167.0	-40.6	-36.6	54.6	1.20	1.20	0.80
1,215.0	9.60	229.00	1,211.4	-45.4	-42.2	61.9	0.84	0.82	-1.04
1,260.0	10.14	230.48	1,255.7	-50.4	-48.1	69.6	1.33	1.20	3.29
1,351.0	10.80	229.60	1,345.2	-61.0	-60.8	86.1	0.75	0.73	-0.97
					-74.0	103.5	0.75		-0.97 -0.45
1,442.0	11.23	229.19	1,434.5	-72.3				0.47	-0.45 -1.22
1,532.0	11.60	228.09	1,522.8	-84.1	-87.3	121.3	0.48	0.41	
1,623.0	11.70	227.50	1,611.9	-96.4	-101.0	139.6	0.17	0.11	-0.65
1,713.0	11.58	227.30	1,700.0	-108.7	-114.3	157.8	0.14	-0.13	-0.22
1,804.0	10.70	223.40	1,789.3	-121.1	-126.8	175.3	1.27	-0.97	-4.29
1,895.0	10.40	224.00	1,878.8	-133.1	-138.4	192.0	0.35	-0.33	0.66
1,985.0	10.20	222.90	1,967.3	-144.8	-149.4	208.1	0.31	-0.22	-1.22
2,076.0	9.93	224.48	2,056.9	-156.3	-160.4	224.0	0.42	-0.30	1.74
2,166.0	10.30	225.30	2,145.5	-167.5	-171.6	239.8	0.44	0.41	0.91
=			•						
2,257.0	9.80	223.90	2,235.1	-178.8	-182.7	255.6	0.61	-0.55	-1.54
2,347.0	9.50	222.40	2,323.9	-189.8	-193.0	270.7	0.43	-0.33	-1.67
2,438.0	9.10	224.00	2,413.7	-200.5	-203.1	285.4	0.52	-0.44	1.76
2,529.0	9.62	225.98	2,503.5	<i>-</i> 211.0	-213.6	300.2	0.67	0.57	2.18
2,619.0	9.50	226.60	2,592.2	-221.3	-224.4	315.1	0.18	-0.13	0.69
2,710.0	9.80	225.40	2,681.9	-231.9	-235.3	330.4	0.40	0.33	-1.32
2,801.0	9.92	221.65	2,771.6	-243.2	-235.5 -246.1	346.0	0.72	0.13	-4.12
2,891.0	9.65	221.65	2,860.3	-2 4 3.2 -2 5 4.6	-256.2	361.2	0.72	-0.30	0.00
2,982.0	11.12	225.38	2,949.8	-266.5	-230.2 -267.5	377.6	1.78	1.62	4.10
3,072.0	11.69	228.97	3,038.0		-280.6	395.4		0.63	3.99
3,072.0	11.09		3,036.0	-278.6	-200.0	393.4	1.01	0.03	3.99
3,163.0	11.56	230.56	3,127.1	-290.4	-294.6	413.7	0.38	-0.14	1.75
3,254.0	11.01	231.13	3,216.4	-301.7	-308.4	431.4	0.62	-0.60	0.63
3,345.0	10.52	227.71	3,305.8	-312.7	-321.3	448.4	0.88	-0.54	-3.76
3,435.0	10.74	228.42	3,394.2	-323.8	-333.7	464.9	0.28	0.24	0.79
3,526.0	10.06	225.58	3,483.7	-335.0	-345.7	481.4	0.94	-0.75	-3.12
3,616.0	10.24	225.58	3,572.3	-346.1	-357.0	497.2	0.20	0.20	0.00
3,707.0	10.28	227.52	3,661.9	-357.2	-368.8	513.4	0.38	0.04	2.13
3,797.0	9.67	226.57	3,750.5	-367.9	-380.2	529.0	0.70	-0.68	-1.06
3,887.0	9.25	226.57	3,839.3	-378.0	-390.9	543.8	0.47	-0.47	0.00
3,978.0	9.51	226.57	3,929.1	-388.2	-401.7	558.6	0.29	0.29	0.00
4,068.0	9.76	228.00	4,017.8	-398.4	-412.8	573.7	0.38	0.28	1.59
4,159.0	10.22	230.04	4,107.4	-408.8	-424.7	589.4	0.64	0.51	2.24
4,250.0	10.68	230.70	4,196.9	-419.3	-437.4	605.9	0.52	0.51	0.73
4,340.0	10.72	231.73	4,285.3	-429.8 ć		622.5	0.22	0.04	1.14
4,431.0	10.88	229.54	4,374.7	-440.6	-463.6	639.5	0.48	0.18	-2.41
4,521.0	10.57	227.19	4,463.2	-451.7	-476.1	656.2	0.60	-0.34	-2.61
4,612.0	10.00	227.00	4,552.7	-462.8	-488.0	672.5	0.63	-0.63	-0.21
4,702.0	9.80	227.00	4,641.4	-473.3	-499.3	687.9	0.22	-0.22	0.00
4,793.0	9.82	224.92	4,731.0	-484.1	-510.5	703.4	0.39	0.02	-2.29
4,884.0	10.31	224.90	4,820.6	-495.4	-521.7	719.3	0.54	0.54	-0.02
4,974.0	10.31	224.97	4.909.2	-506.8	-533.1	735.4	0.01	0.00	0.08
5,065.0	10.00	225.30	4,909.2 4,998.7	-500.5 -518.1	-533.1 -544.5	735.4 751.5	0.01	-0.34	0.36



HATHAWAYBURNHAM

Survey Report

Company:

NEWFIELD EXPLORATION

Project:

USGS Myton SW (UT) **SECTION 31 T8S R17E**

Site: Well:

R-31-8-17

Wellbore: Design:

Wellbore #1 Wellbore #1 Local Co-ordinate Reference:

Well R-31-8-17

TVD Reference:

WELL @ 5344.0ft (NEWFIELD RIG) WELL @ 5344.0ft (NEWFIELD RIG)

MD Reference:

North Reference: **Survey Calculation Method:**

Minimum Curvature

Database:

EDM 2003.21 Single User Db

Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
5,155.0	9.40	223.50	5,087.5	-528.9	-555.1	766.7	0.75	-0.67	-2.00
5,246.0	9.49	224.64	5,177.2	-539.7	-565.5	781.6	0.23	0.10	1.25
5,337.0	8.57	226.09	5,267.1	-549.7	-575.6	795.9	1.04	-1.01	1.59
5,427.0	9.49	225.54	5,356.0	-559.5	-585.7	810.0	1.03	1.02	-0.61
5,518.0	9.76	225.34	5,445.7	-570.2	-596.6	825.2	0.30	0.30	-0.22
5,608.0	8.50	222.51	5,534.6	-580.5	-606.5	839.5	1.49	-1.40	-3.14
5,699.0	7.87	218.13	5.624.6	-590.3	-614.9	852.4	0.97	-0.69	-4.81
5,790.0	7.90	213.36	5,714.8	-600.5	-622.2	864.7	0.72	0.03	-5.24
5,880.0	8.42	217.32	5,803.9	-610.9	-629.6	877.2	0.85	0.58	4.40
5,971.0	8.06	217.85	5,893.9	-621.2	-637.5	890.1	0.40	-0.40	0.58
6,061.0	7.80	221.12	5,983.1	-630.8	-645.4	902.5	0.58	-0.29	3.63
6,152.0	6.83	221.87	6,073.3	-639.5	-653.1	914.0	1.07	-1.07	0.82
6,226.0	6.22	218.53	6,146.8	-645.9	-658.5	922.4	0.97	-0.82	-4.51
6,280.0	6.22	218.53	6.200.5	-650.5	-662.2	928.2	0.00	0.00	0.00

Checked By:	Approved By:	Date:	



Project: USGS Myton SW (UT) Site: SECTION 31 T8S R17E

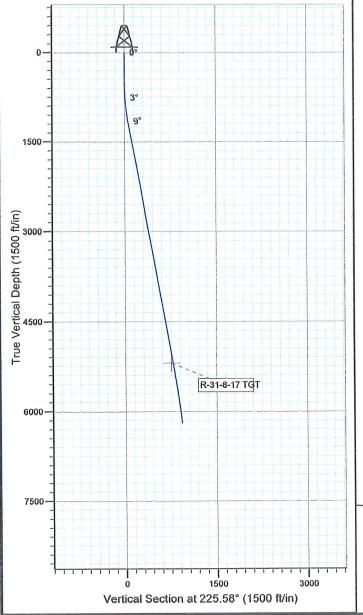
Well: R-31-8-17 Wellbore: Wellbore #1 SURVEY: Wellbore #1

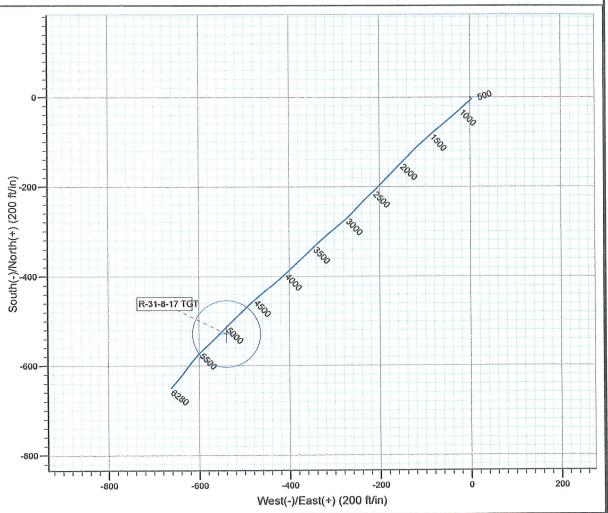
FINAL SURVEY REPORT



Azimuths to True North Magnetic North: 11.48°

Magnetic Field Strength: 52464.4snT Dip Angle: 65.87° Date: 12/31/2009 Model: IGRF200510





Design: Wellbore #1 (R-31-8-17/Wellbore #1)

Created By: Sim hudson Date: 7:22, February 09 2010
THIS SURVEY IS CORRECT TO THE BEST OF MY KNOWLEDGE
AND IS SUPPORTED BY ACTUAL FIELD DATA.

Daily Activity Report

Format For Sundry SANDWASH R-31-8-17 12/1/2009 To 4/28/2010

SANDWASH R-31-8-17

Waiting on Cement

Date: 1/25/2010

Ross #29 at 320. Days Since Spud - Run 7 jts 8 5/8" casing (Guide shoe, shoe jt., baffle plate, 6jts) Set @ 320.51' KB - On 1/28/10 Cemented 8 5/8" casing W/ 160 sks Class " G" + 2% CaCl +.25#sk CelloFlake - mixed @ 15.8ppg W/ 1.17 yield Returned 5bbls of cement to pit. - Ross Rig # 29 Spud the Sand Wash Fed. On 1/28/10 @ 9:00 AM Drilled 320' pf 12 1/4" bole

Daily Cost: \$0

Cumulative Cost: \$42,153

SANDWASH R-31-8-17

Waiting on Cement

Date: 2/5/2010

Capstar #328 at 320. 0 Days Since Spud - Rig down and prepare to move to the Sandwash R-31-8-17 on 2-5-10. (.75 mile move)

Daily Cost: \$0

Cumulative Cost: \$42,503

SANDWASH R-31-8-17

Drill 7 7/8" hole with fresh water

Date: 2/6/2010

Capstar #328 at 1042. 1 Days Since Spud - PU Smith Mi 616 77/8", 77/8" Dog sub 6.5" Hunting 4.8 stg 1.5 degree MM, 1x30.15' monel, Gap sub 3.4 - BLM & State was notified of Rig move & Bop test on 2/4/10 & Move on 2/5/10 & Test @ 4:00 PM - Rig down on the Sand wash Fed N-31-8-17 - Move Rig & rig up w/ Howcroft on Sandwah Fed R-31-8-17 on 2/5/10, Moved 1/4 mile - Nipple up bops - RU B&C Quick test & Test Top drive-floor valves-Blind rams-Pipe rams-Inside outside choke valves to - 2000 psi for 10 min & Test casing to 1500 psi for 30 min test ok Tested Hydrill 4 times it would not - test so we plugged Hyd lines (Rig went on the clock @ 3:00 PM on 2/5/10) - Set in flow line & Lay out BHA - No H2S in the last 24 hrs - Drill 77/8 hole f/ 370 to 1042 WOB 10/12,000 lbs 184 rpms, 409 gpm, 159 rop - Install rotating head - Drill 77/8 hole f/ 245 to 370 WOB 10/12,000 lbs 184 rpms, 409 gpm, 159 rop - Ant sub 2.55', Monel 31.10', 25 HWDP= 765.15' TIH @ Tag cmt @ 245' - Hook up the flair lines & Load the racks & Strap the BHA

Daily Cost: \$0

Cumulative Cost: \$75,102

SANDWASH R-31-8-17

Drill 7 7/8" hole with fresh water

Date: 2/7/2010

Capstar #328 at 4258. 2 Days Since Spud - Drill 77/8 hole F/ 2808 to 4258' WOB= 21,000# RPMS=184 GPM= 409 ROP= 191' - Rig serv Grease top drive drive lines draw works - Drill 77/8 hole F/ 1042 to 1586' WOB= 21,000# RPMS=184 GPM= 409 ROP= 191' - No H2S IN THE LAST 24 HRS

Daily Cost: \$0

Cumulative Cost: \$93,861

SANDWASH R-31-8-17

Drill 7 7/8" hole with fresh water

Date: 2/8/2010

Capstar #328 at 6252. 3 Days Since Spud - Drill 77/8 hole F/5347 to 6252 WOB = 23,000#

RPMS= 184 ROP= 156' GPM= 409 - Rig serv check crown o matice grease top drive & Drive line draw works - Drill 77/8 hole F/5254 to 5347 WOB = 23,000# RPMS= 184 ROP= 156' GPM= 409 - Kelly hose got a hole in it & they relaced it - Drill 77/8 hole F/4257 to 5028 WOB = 23,000# RPMS= 184 ROP= 156' GPM= 409

Daily Cost: \$0

Cumulative Cost: \$123,100

SANDWASH R-31-8-17

TIH

Date: 2/9/2010

Capstar #328 at 6280. 4 Days Since Spud - Strip in hole with wire line - there fingers in it - Changed out sheave on wire line so someone would not get - Strip in hole - Fishing tools Over shot- Ext-Xo 1jt of HWDP - Hold Saftey mtg & JSA with new crew Cut line on logging truck & Put ends on wire line & RU Slaugh - Hold Saftey mtg & JSA on Rigging up fishing tools - Wait on fishing hand & Tools - 3000# over on wire line work up & down - sated Density Compensated Neutron (Loggers depth 6289') The loggers got stuck @ 5366' we pulled - RU Phoenix surveyInc log well F/TD to 5366' w/ Duel Induction Guard log Gamma Ray Calipar log Compen - LDDP & BHA - Pump sweep & Circ for lay down - Drill 77/8 hole f/ 6252' to 6280' WOB = 23,000# RPMS= 184 ROP= 156' GPM= 409

Daily Cost: \$0

Cumulative Cost: \$197,934

SANDWASH R-31-8-17

Rigging down

Date: 2/10/2010

Capstar #328 at 6280. 6 Days Since Spud - BLM & State was notified of rig move & Bop test - Fishing tools Over shot- Ext-Xo 1jt of HWDP - Clean mud tanks - Clean Mud tanks - Nipple down & set 5.5 casing slips w/ 92,000#s - RD BJ - Pump 148 bbls of disp 25 bbls cement returned pit bumped plug to 2200 psi - 50:50:2+3%KCL+0.5%EC-1+.25#CF+.05#SF+.3SMS+FP-6L 14.4 ppg & 1.24 yeild - PLII+3%

KCL+5#CSE+0.5#CF+2#KOL+.5SMS+FP+SF & Mixed 454 sks of tail cement mixed @ - Hold saftey mtg PSI test BJ lines to 3800 psi & Pump 252 sks cement mixed @ 11 ppg & 3.53 yeild & - Circ & RU BJ - 6 jts will be transferred to the next well Ute Tribe 3-1-5-1E - RU & Run 168 jts of 5.5 J55 15.5# LTC Shoe is @ 6267.18' Float coller @ 6227.76' - Put 5.5 casing rams & Test W/ B&C Quick test to 2000#s for 10 min test ok - TOOH with fish & Lay down fish - Pull out of rope socket on wire line truck - Tag fish work pipe to get on fish - Trip last 3jts real slow to get on fish - Fishing tools Over shot- Ext-Xo 1jt of HWDP - BLM & State was notified of rig move & Bop test - Release rig @ 8:30 AM on 2/10/10 - Clean mud tanks - Clean Mud tanks - Nipple down & set 5.5 casing slips w/ 92,000#s - RD BJ - Pump 148 bbls of disp 25 bbls

cement returned pit bumped plug to 2200 psi - 50:50:2+3%KCL+0.5%EC-

1+.25#CF+.05#SF+.3SMS+FP-6L 14.4 ppg & 1.24 yeild - PLII+3% KCL+5#CSE+0.5#CF+2#KOL+.5SMS+FP+SF & Mixed 454 sks of tail cement mixed @ - Hold saftey mtg PSI test BJ lines to 3800 psi & Pump 252 sks cement mixed @ 11 ppg & 3.53 yeild & - Circ & RU BJ - 6 jts will be transferred to the next well Ute Tribe 3-1-5-1E - RU & Run 168 jts of 5.5 J55 15.5# LTC Shoe is @ 6267.18' Float coller @ 6227.76' - Put 5.5 casing rams & Test W/ B&C Quick test to 2000#s for 10 min test ok - TOOH with fish & Lay down fish - Pull out of rope socket on wire line truck - Tag fish work pipe to get on fish - Trip last 3jts real slow to get on fish - Release rig @ 8:30 AM on 2/10/10 **Finalized**

Daily Cost: \$0

Cumulative Cost: \$323,687

Pertinent Files: Go to File List